Moving beyond physical mobility: blogging about urban cycling and transport policy

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Laura Golbuff

Abstract

It is often acknowledged that movement exists in multiple, interdependent forms and that we live in an Information Age. However, *mobilities* perspectives on contemporary cycling tend to neglect the a) interconnections between transport (physical mobility of people and objects) and communication (mobility of symbolic information) b) paradigmatic shifts in modernity that affect *how* and *why* we communicate *about* transport. This thesis responds to such neglect. Firstly, it places urban cycling in an internet context by examining practices and perceptions of *policy blogging*, asking *why do individuals blog about cycling-related transport policy* and *to what effect?* Secondly, it analyses the answers to these questions through the theoretical lens of the risk society and reflexive modernisation theses. Empirical data is the result of 46 semi-structured interviews with bloggers and expert system representatives, mostly in London, New York and Paris.

Blogging about cycling-related transport policy is shown to be an individualised response to the perceived failings of expert systems, as well as in Giddens' words, a 'reflexive project of the self'. Citizens who may otherwise only be policy subjects or passive consumers of transport, emerge as policy, media and civil society *actors* by virtue of their ability to publish information, which forms the basis of social relations. Through blogging, they produce and mobilise knowledge. Knowledge claims mediated by blogging interact with expert systems responsible for transport, which in turn adapt; routine institutional practices evolve; a new order emerges; blogging makes a difference. That difference is however limited, not least because the public remains reliant on expert systems. Ultimately, despite the obvious importance of physical mobility to cycling, this thesis seeks to move beyond it. Information and communication technologies have radically altered how we - researchers, the public, expert system representatives - communicate about and understand cycling, and as such, this project argues for a renewed emphasis on *mobilities* in a genuinely plural sense of the word as being about more than physically moving from A to B.

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For my parents

Chapter 1: Introduction

In the final weeks of preparing this thesis I attended a workshop for cycling researchers. At one point we were tasked with brainstorming ideas for an upcoming conference on urban cycling policy, including potential topics, speakers and formats. Before handing the floor over to the group, the person leading the discussion suggested one thing we all bear in mind: 'This conference really needs to be about the learning *experience* because delegates already have all the information; they can learn about everything online'. Although the value of meeting face-to-face was exemplified by our very presence in the same room, the remark clearly struck a chord and was met with knowing nods and giggles. We had all been there - online that is - searching for information about transport, reading up on or viewing images of various cycling-related policies and concepts, digesting that information and communicating about it online with others.

Given the main topic of this thesis - the public's internet-mediated communication about cycling-related transport policy - I was particularly pleased that the point had been made. Indeed I was all the more pleased because often it is not. *How and why* we - as professionals, citizens, humans alive at this point in history - communicate, take interest in and learn about different issues, including transport, as this thesis suggests, has radically changed. Indeed even by historical standards, 'we live, it is widely accepted, at a time of unprecedented change [...] which is reshaping just about all aspects of our everyday lives' (Webster, 2001: 1 and 2). In contrast to earlier revolutionary eras (such as the Industrial Age) in which technological change took time to permeate through space, change in the Information Age is less 'incremental' to those of us living through it. On the contrary, 'in space of a very few years' digitalisation became a very normal part of life (Webster, 2001: 2). One consequence of rapid and profound 'everyday' change is that we come to expect it (Webster, 2001). Another, closely-linked, is that we risk taking for granted *the difference* it makes.

So whilst it goes without saying that how we communicate about transport policy has radically changed, that is precisely the issue: it *does* tend to go without saying. The above remark about delegates being able to 'learn about everything online' was not preceded nor followed at the workshop by any other discussion about the interconnections between cycling and information and communication technologies. Such apparent oversight, or perhaps disinterest, is not uncommon. It is reflected in the literature on cycling and to a lesser extent *mobilities*, common subjects of which may be described in terms of what Dennis and Urry (2009: 19) refer to as the 'two distinct kinds of things that provided the background to people's everyday lives' prior to circa 1990: the 'natural world' and "artificial' objects' of the industrial revolution' (e.g. bicycles, cars, human bodies and the

earth over which they move). Equally important however is the movement of information *about* that physical movement.

1.1 Thesis in Brief

The overarching goal of this project is to move cycling research 'beyond physical mobility'. So whilst it is recognised that without physical mobility there would obviously be no cycling to begin with, this project foregrounds something else instead: communication *about* that physical mobility. It does so using a particular theoretical interpretation of late modernity - the risk society and closely-aligned reflexive modernisation theses - which together suggest that the unintended consequences or manufactured risks of early modernity (including those associated with transport) have become ever-increasingly the subject of public debate. This project's unit of analysis is a particular medium of communication: *policy blogging*. Practices and perceptions of policy blogging are qualitatively analysed based on data collected from 46 semi-structured interviews with bloggers and representatives of expert systems in mostly London, New York and Paris between September 2011 and September 2012.

Following this chapter, the next one reviews literature relating to mobilities, risk and knowledge. Then, the rationale underlying my methodology is discussed in more detail. From there, another chapter is dedicated to setting the scene or contextualising cycling in relation to 1) three expert systems (the urban state, instituted media, cycling's civil society), each of which has, in one way or another, responsibility for transport and its risks 2) the phenomenon of blogging about cycling-related transport policy. Subsequently, four empirical chapters broadly address the questions why do individuals blog and to what effect? The concluding chapter rounds up the key themes raised across the empirical ones and suggests where future research may be directed from here.

As a result, this thesis responds to calls for researchers to combine the study of material and symbolic movement (i.e. the study of transport and communication), as well as to focus specifically on the information and communication technologies mediating movement (Hannam et al, 2006; Morley, 2011; Packer, 2008; Sheller and Urry, 2000; Sheller and Urry, 2006; Wiley and Packer, 2010; Urry, 2007). This thesis builds on and nuances work concerned with internet-mediated knowledge production (Fuchs and Hofkirchner, 2005; Fuchs, 2008; Fuchs et al, 2010). It addresses the lack of mobilities studies that position transport squarely in relation to modernisation (Rammler, 2008). And despite obvious concerns about the social and environmental risks of modern transport (namely automobility), this is one of few studies (e.g. Hajer and Kesselring, 1999) that examine cycling within a risk society theoretical framework. Perhaps most importantly however, this study provides insight into a previously unstudied phenomenon; begins to fill the 'internet void' within

cycling research; acknowledges cycling's 'other' mobilities; and advances the mobilities agenda by examining the interconnections between those 'other' mobilities and predominant understandings of cycling as physical movement.

1.2 Structure of Thesis

Chapter 2: Literature Review positions this thesis in relation to three interconnected key themes and literatures. The first section highlights the contributions of *mobilities* for putting 'social relations into travel' (Sheller and Urry, 2006: 208), whilst at the same time suggesting that travel, in the sense of physically moving from place A to place B, is privileged in the literature at the expense of (its interaction with) other mobilities. Studies of communication (the movement of symbolic information) and studies of transport (physical movement of people and objects) tend notably to be approached separately. This is particularly apparent in light of developments in information and communication technologies, which research on cycling all but neglects in favour of examining physical movement (and its associated material dimensions). Unlike historical accounts of cycling, which tend to take into account early modern social structure, contemporary accounts tend to neglect its late modern equivalent, which is the result of paradigmatic shifts said to have emerged towards the end of the twentieth century. A particular interpretation of late modernity, Beck's (1992) risk society and the closely-aligned theory of reflexive modernisation (Beck et al, 1994), is outlined in the second section. Risk as the subject of public discourse, as well as the individualisation and sub-politicisation of cycling-related transport policy and reflexive mobility are all suggested research opportunities. The final section on knowledge sketches out the significance of information and communication (technologies) to the age, whilst highlighting how expert (as opposed to lay) knowledge is privileged by both risk society theorists and transport and cycling researchers, the latter of which tend narrowly to conceptualise the public's understandings of transport as acquired through physical movement (i.e. experiential knowledge). The public's more abstract or conceptual understandings of transport and cycling are meanwhile neglected, along with the methods used to acquire them, such as especially, the internet as a social self-organising system.

Chapter 3: Methodology begins by explaining the choice of policy blogging as this project's unit of analysis, as well as London, New York and Paris as primary fieldwork locations. In this first of three sections, the project's research questions are also spelt out, as is the rationale behind taking a qualitative approach. The second section of this chapter explains my choice of semi-structured interviews as a data collection strategy, particularly in relation to 'mobile methods' as a possible alternative. The final section addresses the practical details of carrying out the research (participant recruitment, interviewing technique and data coding) and outlines my positioning as the researcher.

Chapter 4: Context sets the scene of the subsequent empirical chapters by contextualising cycling in relation to urban government (section one), instituted media (section two) and cycling's civil society (section three) as three expert systems with responsibility for transport and its risks. The fourth section contextualises the phenomenon of blogging about cycling-related transport policy in London, New York and Paris: what do these blogospheres look like? The contents of this chapter draw on a mixture of academic literature, empirical data, policy documentation and basic internet research (in the case of blogging).

Chapter 5: Blogging in Response to Expert Systems, Blogging as Individualisation is the first of four empirical chapters and aims to address the question Why blog? The first three of its sections each correspond to one of the expert systems of concern to this project (urban government, instituted media, cycling's civil society), whilst the final section is about blogging in relation to the individual self (as opposed a system). As such, this chapter argues that blogging is a response to the perceived failings of expert systems, and/or, is more biographical, a 'reflexive project of the self' (Giddens, 1991b: 5).

Chapter 6: Blogging and the Production and Mobilisation of Policy Knowledge aims to address the question How do individuals exploit the affordances of blogging to try to make a difference? This chapter is particularly concerned with the significance of knowledge and processes of learning (about transport policy) in late modernity. Its first two sections present evidence of blogging as cognition, communication and cooperation, based on Fuchs and Hofkirchner's (2005) model of knowledge production. By mediating users' self-organisation, blogging is shown to result in specific synergies and new individual and collective understandings. The third section meanwhile, whilst maintaining the chapter's focus on knowledge, switches gears slightly to consider blogging in relation to the mobilisation of policy knowledge.

Chapter 7: New Order: Interaction, Adaptation and the Making of Difference aims to address the question Does blogging make a difference to expert systems responsible for transport, and if so, how? It is split into three sections corresponding to each expert system. All three sections present evidence demonstrative of the various ways blogging makes a difference, which collectively may be understood as a matter of interaction and adaptation of system elements.

Chapter 8: Plus Ça Change: Reliance and the Fallibilities of Policy Blogging is the final empirical chapter and its aim is to consider whether blogging is not making a difference, and if so, why? Contrary to previous chapters, which paint blogging in a largely successful light, this chapter's four

sections each highlight its different limitations. Ultimately it concludes that the greatest limitation of blogging to make a difference is the public's reliance on expert systems.

Chapter 9: Conclusions looks both backwards and forwards and is split into two sections accordingly. The first draws attention to three themes arising from the empirical chapters: 1) moving beyond physical mobility 2) internet or computer-mediated knowledge and communication 3) transport and its risks as the subject of communication and public debate. The second section reflects on some of the project's limitations and suggests three recommended directions for future cycling research to take from here: 1) computer-mediated communication as data 2) policy boosterism 3) cycling's inter-urban relations.

In short, this thesis is positioned at the intersection of transport and communication, and physical and virtual/digital mobilities or social relations. It foregrounds communication *about* cycling-related transport policy over and above physical movement itself. The purpose and effects of that communication are understood in relation to the risk society/reflexive modernisation theoretical framework. Ultimately, it is argued that blogging *does* make a difference, although that difference is limited by the public's reliance on expert systems.

Chapter 2: Literature Review

This chapter reviews the literature relevant to this thesis and is organised into three interconnected sections. The first begins by considering the value *mobilities* perspectives add to studies of movement in all its forms, whilst at the same time suggesting that such perspectives are all too often reduced to physical movement, despite its very dependence on other forms of mobility. Cycling, for example, entails much more than getting from place A to place B, and yet its research, which is largely concerned with the material aspects of physical movement, tends to neglect macro-level changes in the movement of information and communication with which the act of riding a bicycle is entwined. As such, this first section acknowledges calls for research to bridge the gaps between studies of transport and communication, as well as mobility and modernity.

One approach to modernity, Beck's (1992) *risk society* thesis, is the subject of the second section. In it, three tenets are introduced: risk, reflexivity and individualisation, along with their relevance to transport. Following risk society logic, as people become increasingly aware of the social and environmental risks associated with modern transport (namely, automobility), they attempt to take responsibility for them in increasingly individualised and uninstituted ways, 'outside' the expert systems they are thought to no longer trust to act on their behalf. Their actions, this section argues, are under-explored in literature that privileges institutional transport relations, along with conceptions of transport citizenship as physically-enacted.

Taking responsibility and action, meanwhile, is more than ever a matter of *knowledge*, the subject of the third and final section that argues despite the significance of knowledge and the information and communication technologies (ICTs) with which it is associated, little is known about how the public produces and acquires knowledge *about* transport in ways other than physically moving. Despite the suggestion that knowledge is more than ever important and mobile in late modernity, although also uncertain and fallible - and hence more likely to be challenged and shaped by a plurality of competing claims, actors and types of knowledge - transport policy remains overwhelming understood as the domain of instituted expert knowledge and actors. As what is at stake here is the application of knowledge to mitigate the risks of modern transport, this section also considers *system change*, arguing that the system implications of the public's ICT-mediated interactions about transport and reflexive mobility are not well understood.

Common to all three sections is the suggestion that research on cycling has tended to neglect cycling's positioning in relation to relatively recent paradigm shifts, which have been prompted in part by emerging interactions between physical and virtual worlds (i.e. shifts from bound societies

to fluid mobilities, from security to risk, from an industrial to knowledge-based mode of development).

2.1 Mobilities

Mobilities and Transport

Social science perspectives on movement - mobilities - are credited with bringing together various scales and types of movement that tend otherwise to be 'held apart' and analysed separately (Cresswell, 2011: 551). A new paradigm is said to have emerged, with mobilities of people, objects and information increasing and taking on new forms as they move via diverse and emerging infrastructures (e.g. 'bodies combine with information', Cresswell, 2011: 551) (Hannam et al., 2006; Sheller and Urry, 2006). Before arriving at this point, a few of the signs that we were headed here include Giddens' (1991a) work on the 'dynamism' of late modernity, with its time-space relations ever-increasingly lifted out of 'situatedness' in a constant state of dis-embedding and reembedding; Beck's (1992) identification of an emerging second age of modernity that is much less confined or stable that the one preceding it; Castells' (2010; 1997: 12) suggestion that in the emerging network society, time and space are separated and recombined in ways that enable instantaneous connections across distance, resulting in the 'space of flows' and 'timeless time' superseding the 'space of flows' and sequential ordering ('past, present and future in the same hypertext'); and, not least, Urry's (2000; 2007) two monographs setting out the significance of mobility - rather than time-space bound society - as the key organising concept or defining factor of sociality in late modernity. The emphasis and point of departure has, in other words, shifted, from social relations being produced within time and space to across time and space as networks of people, objects and information move.

Mobilities has been criticised for 'over-theorising and over-conceptualising issues at the expense of a solid, empirically based assessment' (i.e. mobilities as 'too cultural', Shaw and Hesse, 2010: 307 and 308). There are also concerns that it is positioned 'extremely broadly' (Shaw and Hesse, 2010: 305), having become 'a most elusive theoretical, social, technical, and political construct' (Cresswell and Uteng, 2008: 1) (i.e. 'if mobility is everything then it is nothing', Adey, 2006). Nonetheless mobilities has clearly struck a chord, having been recognised as one of the 'leading issues of formative influence in human geography' and overtaking 'transport' as a topic in geography journals (Cresswell, 2011: 552). Its prominence is 'not just in geography but across the social sciences' (Shaw and Hesse, 2010: 305), however, with the wide range of topics it has inspired 'an indication of its analytical merit' (McCann, 2011: 112).

Understandings of transport, as one type of movement, are understood to have particularly benefited from the 'more holistic view' (Cresswell, 2011: 550) of mobilities research, which takes into account transport's inherent social relations, thought otherwise to be obscured by perspectives more concerned with calculating, rationalising and modelling physical movement (Aldred, 2010; Horton et al, 2007; Larsen et al, 2006; Sheller and Urry, 2006; Spinney 2009). As such, 'mobilities fills a major research gap [...] by setting out to (dis)cover a range of topics behind and beyond 'traditional' transport geography' (Shaw and Hesse, 2010: 306), including perhaps most commonly, automobility's overwhelming impact on social life (Sheller and Urry, 2006). That research primarily deals with automobility's negative social consequences or risks, such as the immobilities with which it is associated; automobility as limiting other types of mobility or other actors' capacity to be mobile or to access movement (Packer, 2008; see also next section on citizenship). Urry has particularly contributed to this work (e.g. Urry, 2004; 2006; 2008; Sheller and Urry, 2000; Dennis and Urry, 2009), whilst scholars of cycling, whose contributions to understandings of 'everyday transport' have multiplied since the mobilities turn (e.g. Aldred, 2013; Horton et al, 2007; Jones, 2012; Spinney, 2009), are particularly concerned with privileging the mobility of 'people as motorists' (Aldred, 2010: 37) at the expense of cyclists, pedestrians and other road and public transport users.

In addition to the physical movement of people and things, Urry (2000) identifies three other types of movement, which he argues, tend problematically to be approached and analysed separately, despite their overlaps and interdependencies: 1) imaginative travel through imagery or visual media 2) communicative travel through messages 3) and virtual travel as 'communication between people who are geographically distant' (Szerszynski and Urry, 2006: 117). Common to these is a mental or cognitive dimension of movement, which gets overlooked by accounts that favour or isolate physicality (exceptions include Beckmann's (2001a; 2001b) work on reflexive mobilities and Canzler's (2008: 105) work on motility, or the ability to move, which 'begins in the mind'). Indeed, its overwhelming interest in the physical movement of humans and objects (in addition to transport, tourism and migration studies are strongly linked to mobilities research) has meant that even mobilities research, with its interest in 'all forms of movement' (Cresswell, 2011: 552) pays comparatively less attention to other types of movement, and to the 'profoundly important' connections between types of movement that form the networks that have come to define contemporary society (Urry, 2002a: 1; Castells, 2010).

Reflective of those tendencies, the terms 'mobility' and 'transport' are frequently used synonymously: 'the word 'transport' is often replaced by 'mobility' [but 'mobility'] covers not only basic transportation' (Freudendal-Pedersen et al, 2001: 95; Canzler, 2008). To take only a few examples, Beckmann (2001a), Jensen (2006), Murray (2012) and Stjernborg et al (2014) refer to

everyday transport as 'everyday mobilities', whilst Shaw and Hesse (2010: 307 and 308) argue that mobility is 'inherently geographical since in its most basic form it is about movement between places across space' and 'essentially the ability of individuals to move around' (but seemingly not, for example, of images, messages or other information virtually). Whilst car and plane travel have attracted the most attention from mobilities scholars, Cresswell (2011: 553 and 555) highlights studies of 'less obvious' forms of mobility such as 'travelling by ferry, canoeing, travelling by motorcycle and waiting in line', as well as 'walking in modern traffic', whilst recommending shipping as a topic for future research (to help offset any claims to mobilities' 'newness'). In remarking that these examples 'reveal the full promise of the mobilities turn', Cresswell (2011: 553) may instead reveal its self-limiting capacity, insofar as A to B physical movement of humans and objects is regularly foregrounded despite the promise that mobilities, in contrast to transport, is about 'so much else besides' (Cresswell, 2011: 554; Shaw and Hesse, 2010).

The point here is not to suggest that studies of mobility fail to account for non-bodily or non-materialised movement (see for example Allen-Robertson and Beer (2010) on the mobility of ideas; McCann (2011) on the mobility of policy; Szerszynski and Urry (2002 and 2006) on the mobility of imagery), or that they fail to consider other aspects of physical movement beyond transport (e.g. the sensory, political, cultural) - on the contrary - but rather, to draw attention to an apparent contradiction between the claim that *mobility is possible without physical movement* and a disproportionate amount of mobilities studies focusing precisely on it. That is, whilst as a 'social concept' (Kesselring, 2008: 92), mobility is diverse, with people, objects and information recognised *to be moving without physically moving*, its 'reduction to spatial movement, traffic and travel' (Kesselring, 2008: 92) is not uncommon.

Transport and Communication

The tendency to conceptualise mobility as physical movement or to analyse physical movement separately from other types of movement on which it depends is particularly problematic given the significance of information and *its* movement in late modernity (see section 2.3). There has been a 'tremendous increase in virtual travel' (Szerszynski and Urry, 2006: 117), with technological progress having resulted in the movement of information becoming independent from geographic proximity or the movement of people and objects it once relied on to be delivered. Correspondingly, studies of communication (the movement of symbolic information) and transport (the physical movement of humans and objects) - historically intertwined - have too become increasingly separated (Fuchs and Hofkirchner, 2005), despite the fact that 'we are living our lives at the points where electronic information flows, mobile bodies, and physical places intersect in particularly useful and engaging ways' (Mitchell, 2003: 3; see also Castells (2010: 31) on the 'close

relationship between the social processes of creating and manipulating symbols [...] and the capacity to produce and distribute goods and services'). For example, studies concerned with media portrayals or policy knowledge of cycling tend to neglect the mobility of that information in favour of focusing on the mobility of people and bikes that information represents (e.g. Daley and Rissel, 2011; Rissel et al, 2010). As such, because physical rather than symbolic movement is often the concern, even understandings of 'best practice' cycling policy knowledge are generally static and place-based (e.g. as 'Danish' or 'Dutch') despite such knowledge being imported-exported and more agile than the material aspects of cycling it represents (e.g. Pucher and Buehler, 2008). And whilst the concepts of *policy transfer* and *policy mobilities* go some way in addressing this issue, they have not been applied specifically to cycling (until now, see section 6.3). Moreover, they risk falling into a similar trap by conceptualising policy mobility as the outcome of *travelling rather than communicating* human policy actors (as demonstrated by McCann (2011) and McCann and Ward (2012) and discussed in section 6.3).

There is something of a paradox between communication having become less reliant on proximity and physical movement, whilst proximity and physical movement have become more reliant on, or at least more defined by, communication. Indeed, as Sheller and Urry (2000: 751-752, emphasis mine) argue, whilst most of the twentieth century was characterised by the 'separation of information transmission from the physical means of transportation [...] the current trend, in contrast, is toward the *re-embedding* of information and communication technologies'. Transport has, for too long, they argue, been treated like 'a free-standing system disconnected from other technologies and socialities' (Sheller and Urry, 2001: 751), leading them six years later to call for researchers to examine 'how the transporting of people and the communicating of messages, information, and images increasingly converge and overlap' (Sheller and Urry, 2006: 212); the 'complexity of mobility systems and the inter-relational dynamics between physical, informational, virtual and imaginative forms of mobility' (Hannam et al, 2006: 15). Likewise, communications scholar Packer (2008: 185) argues for 'a renewed importance placed upon the function of transportation as a cultural and communicative practice [...] The two need to be thought of in the same terms [...] transportation and the forms of mobility produced by its various modes need to be analyzed as key sites of cultures and communication. Struggles over mobility and access thus need to be examined in both the virtual and material realms'. Media scholar Morley (2011: 756) meanwhile calls for 'better integration of the analysis of symbolic communications and material forms of transport', whilst Wiley and Packer (2010) suggest that communication needs to be rethought 'within a broader social field' that includes the 'mobilization and immobilization of bodies [...] [and goods and] the development and regulation of infrastructures of transport'.

Two of the ways that transport and information and communication technologies (ICTs) do intersect in the mobilities literature relates to 1) virtual mobility as a means of making the best use of physical (im)mobility 2) the use of portable ICT devices or objects during transport journeys. Firstly, there is body of work that considers the strategic use of and trade-offs between physical and virtual movement (e.g. Carrasco et al, 2006; Shirky, 2010; Wellman et al, 2002). The Mobility Pioneers project, for example, found that by using 'virtual mobility as a 'mode of transport", individuals were able to manage their personal and professional networks in such a way as to both reduce and realise physical movement to their personal advantage (Kesselring and Vogl, 2008). Similarly, Larsen et al (2006) examine ICT use as a means of *coordinating* social relations, including the physical mobility required when those relations occur face-to-face. Whilst accounting for interconnections between mobilities, as well as the wider, late modern social structure in which they occur, such studies do not tend to examine virtual or communicative mobilities *in their own right* (e.g. the mental or cognitive rather than physical significance of mobilising information and communication; communication for communication's sake); their interest is framed only *in relation to* actualised physical mobility.

Secondly, there are those studies that examine the intersection between portable ICT devices or objects, and the mobile humans who carry them. This includes, for example, the use of phones on trains (Berry and Hamilton, 2010; Lyons et al, 2013); audio devices on bikes (Jungnickel and Aldred, 2014); and various other technologies in cars and motorway service stations (Hislop, 2013). Again, whilst accounting for interconnections between mobilities, these studies tend to 'rely' on physical movement rather than examine the mobility of information and communication *in its own right*; virtual and communicative mobilities are of interest only *in relation to* actualised physical movement. If the people being studied were at the same time physically immobile (not using trains, bikes or cars) but mobile in other ways (e.g. via their ICT objects), it is questionable whether such research would emerge from *mobilities* at all. All this despite the mobility of information and communication possibly being what physically-mobilises people (and therefore their ICT and/or vehicle objects) in the first place; despite the abundance of studies that examine physical mobility for *its* own sake and in isolation from other mobility types; and despite mobilities being about 'all forms of movement' (Cresswell, 2011: 552).

Mobilities and Modernities

The 'key issue', moreover, is not 'the *objects* that are involved in movement (such as vehicles or telephones or computers)', but rather, as Urry (2007: 52, emphasis mine) suggests, 'the structured *routeways* through which people, objects and information are circulated'. Despite this, the social sciences tends to 'overly concentrate upon subjects interacting together and ignore the enduring

systems that [...] enable the movement of people, ideas and information' (Urry, 2007: 12). With the potential routeways having expanded beyond the confines of manufactured objects (e.g. cars, bikes or even portable ICT objects) and the nature they traverse (i.e. land, sea), mobility has evolved correspondingly (Dennis and Urry, 2009). For scholars interested in the relationship between mobility and modernity, these changes translate into the former reflecting the latter, or 'structural changes in mobility' (Kesselring, 2008: 92) as it becomes relatively more fluid, networked, complex, de-centralised, non-linear, non-directional, unpredictable, uncontrollable and reflexive (e.g. Beck, 2008a; Kesselring and Vogl, 2008; Rammler, 2008; see Castells (2010) and Urry (2000) on evolving notions of *time*, as well as Larsen et al (2006) and Southerton (2003) on the significance of those changes for coordinating social relations and hence mobility). As such, and not unlike Urry's 'key issue' above, the 'key question' of mobilities research, according to Kesselring (2008: 80), is 'How do people realize connections and exchange in a global society of networks, scapes and flows?'

Surprisingly, as Rammler (2008: 58) notes, 'there have been few notable sociological attempts to systematically position mobility and transportation in the context of modernisation'. Indeed, in terms of contemporary cycling, Kesselring's 'key question' seems to remain largely unaddressed, perhaps explaining Horton et al's (2007: 9) observation that beyond the areas of history, sport, health and design/planning, there is 'no strong sense of [cycling research] contributing to a wider stock of knowledge'. That is, despite claims of paradigmatic time-space shifts in both mobility and modernity¹, a decade or so of significant progress in social science understandings of cycling (indeed a 'concerted intellectual push', Horton et al, 2007: 9), not to mention significant changes to cycling itself (particularly in cities, see Chapters 3 and 4), cycling research remains largely concerned with A to B physical movement bound by time and space; material infrastructures associated with physical movement; the bicycle and other objects (e.g. cars) used to realise physical movement; and people who do or do not use bicycles to physically move. Despite Sheller and Urry's (2006: 212) call for mobilities research to avoid the same pitfall as transport research that tends to examine 'simple categories of [physical] travel' (e.g. commuting, leisure, business) 'as if these were separate and self-contained', cycling research leans heavily on precisely such categorisations (see for example Horton et al (2007) on different 'cyclings', such as everyday/commuter, racing, utility, leisure, sport, touring, children's). Whilst historical investigations generally foreground the early modern social structure within which cycling was once 'situated', therefore demonstrating that cycling has long represented more than the overcoming of physical distance (namely classism and sexism, e.g. Garvey, 1995; Mackintosh, 2007; Mackintosh and

^{1 &#}x27;A dazzling variety of terms has been suggested to refer to this transition' (Giddens, 1991a: 1), not least liquid, late, radicalised and reflexive modernity, information society, network society, post-industrial society, risk society and 'beyond societies' (Bauman, 2000; Beck, 1992; Bell, 1973; Castells, 2010; Urry, 2000).

Norcliffe, 2007, but also national identity, e.g. Carstensen and Ebert, 2012 and industrial production, e.g. Harmond, 1971-72; Oddy, 2007), accounts of contemporary cycling largely ignore the 'structural and epochal break – a paradigm shift' in modernity (Beck, 2002: 63; see next section) said to have relatively recently occurred, marked not only by a breakdown of previously more pronounced 'isms' and dependence on physical mobility, but also the emergence of altogether new and uncertain 'routeways' via which the multiple mobilities of cycling occur.

For example, with few exceptions (e.g. Blickstein and Hanson, 2001; Spinney, 2008), research into cycling has not considered what Dennis and Urry (2007: 5 and 40) refer to as 'physical-digital relations' or 'interconnecting physical/digital networks', such as the distance-defying ICT infrastructures and virtual mobilities that mobilise information and communication *about* cycling, therefore affecting its physical practice or contributing to it in other ways. As Spinney (2008: 364) argues, the relationship between the 'increasingly important' 'virtual mobilities of cycling' and the physical mobilities they may affect 'needs to be more fully understood'. Indeed, like 'most thinking about the 'future' of automobility and its governance' (Urry, 2008: 345), research into cycling (or perhaps more appropriately, *velomobility*) tends to follows a 'dominant linear approach' (Urry, 2008: 345) despite cycling/velomobility not being confined to the physical experience of cyclists any more than 'the 'system' of automobility' (Urry, 2004) is confined to 'the experience of automobile use by drivers' (Böhm et al, 2006: 5).

Indeed, perhaps even more so than 'the car', 'the bicycle' seems to have evaded examination as a complex system of interdependent multiple mobilities that occur across scales (see section 9.2). Perhaps this may be explained by the greater distances that automobility, as well as aviation and shipping, are capable of covering, not to mention their global economies and politics; extensive use of resources and social and environmental damage; and fairly-universal material infrastructures (e.g. road design, airports, ports, signalling), all of which make cycling appear provincial by comparison (i.e. highly-differentiated from place to place and 'a more or less conscious non-consumption', Aldred, 2010: 36; Horton et al, 2007; Mcshane, 1999; see Edensor, 2004 on the 'globalization of automobility'). Alternatively, Horton (2005) suggests that the 'localism' of contemporary cycling may be explained by a late modern desire for 'compression' of everyday life (as opposed to early modern 'expansion', see also section 9.2). One may even argue that the lack of research into the system(s) of velomobility is reflected in the term's obscurity, with the more common 'cycling research' named after the bicycle's physical movement, whilst the monograph (Horton et al, 2007) and research group of the same name - Cycling and Society - have not, at least in name, moved 'beyond society' (Urry, 2000).

Mobilities Section Summary

The accounts in this section all highlight the significance of movement, in one form or another, to late modern life. They also point to two main biases or gaps in the literature on mobilities and cycling: 1) neglect of cycling's multiple mobilities, namely that of information and communication about cycling (due to privileging its physical mobility) 2) neglect of cycling as a system in the context of late modernity. The next section expands on these ideas by intertwining them with another key concept of late modernity: *risk*.

2.2 Risk

Risk Society and Reflexive Modernisation

The growth of mobility-induced social relations and the decline of their confinement to time and space corresponds to what some scholars have referred to as *detraditionalisation*, including a retreat of the nation state and the 'social institutions that buttressed this state and were supported by it in turn' (i.e. the 'normal family, the normal career and the normal life history' (Beck et al, 2003: 4); 'inherited norms, values, customs and traditions' (Ekberg, 2007: 346), especially as they relate to marriage, gender and class) (Beck et al, 1994; Beck and Beck-Gernsheim, 2001; Beck, 2006; Castells, 2007; Giddens, 2000; Heelas et al, 1996; Urry, 2000). The relative stability and certainty prescribed by those institutions meanwhile also fades. What was once taken for granted 'as normal' (situatedness, stability, place - the 'container model', Beck et al, 2003: 1) and 'as abnormal' (mobility, change, placelessness) (Sheller and Urry, 2006: 208) becomes less defined and is replaced by uncertainties and insecurities, prompting *risk society* theorists to identify the 'emergence of a risk ethos, the development of a collective risk identity and the formation of communities united by an increasing vulnerability to risk' (Ekberg, 2007: 343). Like *mobilities*, *risk*² emerges as an organising principle in its own right, 'one of the most debated concepts in social and political thought' (Isin, 2004: 217).

A key instigator of these debates, *The Risk Society*, Beck's (1992) first main contribution to the subject, is 'one of the most influential European works of social analysis in the late twentieth century', having had 'little short of a meteoric impact on institutional social science' (Lash and Wynne, 1992: 1). As a 'master narrative' (Mythen, 2007: 807), however, the risk society thesis has been criticised for lacking 'empirical validity' (Mythen, 2007: 803) or 'firm grounding' (Lupton, 2006: 21), prompting calls for its grand theorising to be met with empirical findings (and particularly

² See Chapter 3 for more discussion regarding my interest in risk society and reflexive modernisation.

studies that examine 'the meaning of risk in people's everyday lives', according to Lupton, 2006). In addition to *risk*, Beck's thesis and the closely-aligned theory of *reflexive modernisation*, which he endorses along with Giddens and Lash (1994), hinge on two other key concepts or theses: *reflexivity* and *individualisation*.

Taking each of these in turn and beginning with risk, Beck presents three eras of risk history (preindustrial, industrial and 'risk' societies or pre-modernity, ('first') modernity and 'second' or 'reflexive' modernity), as well as two types of risk (natural and manufactured). The natural risks of pre-industrial and industrial societies were first an accepted part of life (exogenous forces attributed to supernatural or divine powers), then the subject of attempted scientific and industrial control. The risks emanating from the application of that knowledge are the manufactured or technological risks said to define the risk society. In other words, and according to two papers recently re-published to demonstrate the ongoing significance of Beck's thesis some 30 years after its original publication, the risk society marks 'the end to the false confidence of industrial modernity' (Ekberg, 2007: 347); it is, in essence, a matter of 'the 'bads' churned out by the capitalist behemoth com[ing] back to haunt their progenitors' (Mythen, 2007: 797; see also Anaïs and Hier, 2012). Societies made wealthy by industry begin to experience industry's 'once latent' (Anaïs and Hier, 2012: 1) or 'ignored' (Holzer and Sørensen, 2003: 81) adverse side-effects. Progress, rationalisation and control over nature - 'the basic premises of modern society' (Holzer and Sørensen, 2003: 81) - are no longer taken for granted. There is a turning point when we begin to worry less about what nature could do to us and more about what we are doing to nature (Giddens, 1998: 26).

Two main criticisms of the risk society thesis are 1) its 'markedly light historical appraisal' (Mythen, 2007: 796; Hanlon, 2010; Rose, 2000) 2) and Beck's use of the term 'risk'. Regarding the second point, Beck is accused of equating 'Western and middle class risks' with 'poverty, immigration, sex trafficking, and famines' (Hanlon, 2010; 214), whilst simultaneously suggesting that 'wealth may buy safety' (Ekberg, 2007: 361). As such, he is criticised for downplaying 'real' risks, exaggerating socially-constructed ones (although see Beck, 2006), blurring the distinction between 'risk and non-risk' so that the concept becomes superfluous³ (when everything is a risk nothing is) (Ekberg, 2007: 363) and downplaying the hybridity of 'natural' and 'manufactured' risks⁴ (Mythen, 2007: 799). Despite all this, it seems fair to suggest, as Beck does, that risks are less confined than they once were by time and space and in that sense, are relatively less controllable; that risks are now more likely to impact everyday life everywhere; that risks are both actual and perceived, or real and socially-constructed, impacting different lives in both unique and common ways. Thus, while

³ A point that Beck (1992: 36) himself recognises: 'where everything turns into a hazard, somehow nothing is dangerous anymore'.

⁴ Although clearly Beck is aware that ecological problems are social problems and vice versa.

risk itself is nothing new, adherents of the risk society thesis argue that 'the *nature* of risk is' (Franklin, 1998: 1); 'there's a new 'riskiness to risk', Giddens, 1998: 28).

Transport Risk

One thing that late modern risks are not, however, is the result of early modernity's failings. On the contrary, they are the unintentional consequences of its scientific and technical achievements, including, for example, modern transport (Beck et al, 1994 and 2003). That is, although the 'benefits of modern transportation are manifold [...] so are its risks' (Beckmann, 1999: 1). What was 'once seen to be a solution to a transport problem' later turns 'into a problem itself' (Beckmann, 1999: 1). Transport 'holds the modern world together while driving it apart' (Rammler, 2008: 70); 'negative externalities of mobility [transport] have adverse impact on the societal context from which they have emerged – increasing [physical] mobility produces growth pains' (Rammler, 2008: 70). And whilst the ecological risks associated with petroleum-powered movement are well known, the more social consequences were until recently comparatively less studied. As noted in the previous section, mobilities scholars have contributed towards filling that gap and in doing so, reveal the basic principle that the mobility of some corresponds to the *immobility* others, or *mobile* inequalities (e.g. Freudendal-Pedersen, 2009; Ohnmacht et al, 2009). Physically, the unequal distribution of movement and/or its potential is exemplified where motorised mobility is privileged at the expense of, and/or endangerment to, other forms of transport, such as cycling (e.g. Aldred, 2010; Packer, 2008; Urry, 2006). Indeed the unequal distribution of mobility and mobility potential, as well as risk analysis more broadly, are two 'crucial aspects' of future mobilities research, according to Hannam et al (2006: 15-16). Scholars who have used the lens of the risk society and reflexive modernisation theses to critically examine modern transport include Beckmann's doctoral thesis (2001b), Risky Mobility: The Filtering of Automobility's Unintended Consequences, as well as Kesselring's (2008), The Mobile Risk Society (see also Hajer and Kesselring, 1999; Kesselring and Vogl, 2008; Wells, 2012).

Intriguingly however, whilst the risks of modern transport are ever-increasingly known and debated, and hence communication about transport is ever-increasingly communication about risk, few studies (e.g. Hajer and Kesselring, 1999) have examined cycling using a risk society and reflexive modernisation framework. That is, whilst cycling is recognised both as a 'carrier' and victim of early, first or industrial modernity (Horton et al, 2007: 4; Norcliffe, 2001; Pooley and Turnball, 2005), its role in late, second or reflexive modernity is largely neglected, despite it being recognised as 'one appropriate response to a range of contemporary problems' (Horton et al, 2007: 7). Indeed as Spinney (2010: 89) argues, as 'modern forms of mobility have been increasingly problematized', as 'awareness and evidence' grow, cycling is positioned as a

'panacea for modern urban ills'. The subtext is that cycling (despite its industrial origins) is itself understood to be relatively benign, risk-free or indeed, 'moral mobility' (Green et al, 2012: 285) amidst a society fraught with risks - although its positioning as such remains understudied (see section 9.2). Those who have perhaps come the closest (without actually applying a risk society framework per se) include Aldred (2010) and Green et al (2012), who argue that the physical act of cycling is a response to the sense of responsibility some individuals feel towards themselves, others and/or other aspects of their local and/or global environment(s), including the dangers imposed by other modes of transport. What remains unaccounted for however is how such a sense of responsibility - constitutive of the 'new moral economy of transport' (Green et al, 2012: 272) - may be based on a heightened awareness of transport risk (as Spinney suggests above; see also next paragraph) and how such knowledge about transport relates to more macro-level changes in modernity, as well as to other types of mobility (i.e. virtual, communicative, imaginative). Existing research tends to approach the subject of cycling and risk from the perspective of individuals' territorially-bound physical movement, especially the endangerment of those cycle and/or the endangerment of velomobility as a system (due to the practice of cycling being overly feared to the extent that fewer people partake in it)(e.g. Bhatia and Wier, 2011; Elvik, 2009; Horton, 2007), despite the evolving nature of risk, modernity and mobility meaning that the act of riding a bicycle is caught up in a plethora of contemporary processes and systems that are unconfined to space and time.

Reflexive Mobility

Following on from *risk*, the second core concept of the risk society and reflexive modernisation theses - *reflexivity* - is intended to convey 'a heightened awareness that mastery is impossible' (Latour, 2003: 36; Beck et al, 2003); a recognition that expert knowledge is fallible and thus cannot guarantee the control or elimination of risk. Reflexivity is said to characterise late modern life - *reflexive modernity* (Beck et al, 1994). Moreover, like modernity, or indeed as a 'general principle' of it (Kesselring, 2008: 83), mobility (indeed, *transport*) too is understood to have become reflexive - *reflexive mobility* (Rammler, 2008: 70) - as there emerges a heightened awareness of the unintended consequences of transport endangering the modern world it helped to create (Goodwin et al, 1991). Beckmann (2001a: 605), for example, suggests that automobility has transitioned from its first 'traditional' phase to a reflexive one - *reflexive automobilisation* - resulting in 'all autosubjects' - expert and lay - engaging in 'responsive actions against automobilisation risks'. Put another way, Kesselring (2008: 83) argues that the 'self-image of the modern mobility-project' changes, from 'not yet realised' to unrealisable. There is a heightened awareness that the 'modern mobility of autonomous subjects through time and space is illusionary [...] a kind of disenchantment of the modern mobility imperative and the beginning of a realistic appraisal of

mobility' (Kesselring, 2008: 83). Echoing Latour (1993) who argues that human aspirations to be modern, to break free from nature, actually result in the inverse (i.e. non-modernity, socio-natural hybridization), Kesselring (2008: 83) suggests that 'we have never been mobile' (see also Hagman (2006) on 'we have never been auto-mobile' and 'the broken promises of the automobile'; and Fincham (2006) on cycling as 'true automobility').

This awareness moreover results in a situation whereby 'discourses on risk proliferate' (Lupton, 2006: 14); reflexive mobility has 'come to the fore as matter of public debate' (Rammler, 2008: 70); the adverse effects of modern transport 'increasingly become a focal point of discourse and political conflict' (Rammler, 2008: 70) (hence suggestive of the need for research to examine the linkages between communications and transport, see previous section). Indeed Pooley and Turnball (2005: 79) argue that despite concern raised by some at the beginning of the twentieth century, it was not until late in it that the 'significant negative consequences' of unrestricted growth in private car use manifested into widespread debate (Golbuff and Aldred, 2011; Goodwin et al, 1991).

Whilst this shift in thinking has been documented by scholars such as Banister (2002) and Vigar (2002), such accounts tend to take a historical or futuristic national perspective (i.e. what went wrong with transport policy in the twentieth century, when did we realise it, what has changed since then and what more needs to be done to mitigate the risks of modern transport). Such accounts also tend to focus on 'the role of the *institutional* relations of transport planning' (Vigar, 2002: 4, emphasis mine). Opportunities remain therefore to examine how reflexive mobility is currently manifesting in cities, through uninstituted, *individual* relations (including as they are mediated via information and communication technologies, see the next section), and to what effect.

Individuals, Institutions, Systems

The significance of reflexive mobility's individual relations is demonstrated by the third core concept and 'the social structure of second modernity itself' (Beck and Beck-Gernsheim (2001: xxii) being *individualisation*, or 'a shift towards increasingly adaptable individualized approaches' (Anaïs and Hier, 2012: 2) to life as 'classic institutions' (i.e. the state, class, marriage, gender roles) (Lash, 2001: ix) are weakened. A new social structure is said to have emerged 'in which tradition changes its status' and is 'routinely subject to interrogation' (Beck et al, 1994: vi), resulting in the individual becoming the 'basic unit of social reproduction for the first time in history' (Beck and Beck-Gernsheim, 2001: xxii; see also Wellman and Haythornthwaite (2002: 34) and Rainie and Wellman (2012: 124) on the emergence of individuals as the new 'primary unit of connectivity').

In terms of risk, this means that individuals have come to rely less the security afforded by the *primary institutions* (Beck, 1992) they were 'born into' (Bauman introducing Beck and Beck-Gernsheim, 2001: xv) in first modernity, and more on the expert knowledge of *secondary institutions* (Beck, 1992) or *abstract systems* (Giddens, 1991a) in second modernity. Abstract systems provide 'a great deal of security in day-to-day life which was absent in pre-modern orders', Giddens (1991a: 112) argues, with modern transport, despite its risks, being one example. When we travel, we 'enter settings which are thoroughly permeated by expert knowledge' (e.g. roads, traffic control systems, vehicles themselves) and rely on that knowledge: 'In choosing to go out in the car, I accept [...] risk, but rely upon [...] expertise' (Giddens, 1991a: 28). Late modern individuals are, in other words, able to use abstract systems without having concrete knowledge about how they function because they trust system expertise (Schlichter, 2010). Abstract systems and the expert systems that enable them to function thus *depend* on the public's trust; public distrust is a source of vulnerability for such systems (Giddens, 1991a; see also Banister, 2008 on one of the 'necessary conditions' of the sustainable mobility paradigm being 'public confidence'; see also next section on trust).

Late modern individuals are however said to be 'progressively disenchanted with the failure of expert systems to effectively contain and deflect risks'; the 'damaging consequences of manufactured risks arrest the public imagination, leading to general discontent with the operations of expert institutions' (Mythen, 2007: 798; although see Wynne, 1996). Unlike Giddens, Beck is less concerned about the reliance of these systems on the public's trust and more about the public relying on systems they do not trust. Without that trust, he argues, individuals must increasingly take it upon themselves to acquire knowledge and manage risks that such systems are otherwise supposed to do on their behalf (see also Lupton (2006: 14) on governments 'devolving' risk responsibility to the individual).

In other words, individuals must increasingly manage risk; the responsibility of coping with risk 'is being individualized' (Bauman introducing Beck and Beck-Gernsheim, 2001: xvi). And herein lies a key contradiction or paradox of the risk society thesis: between the need for expert knowledge and distrust in it (Ekberg, 2007; van Loon, 2000). That is, even the knowledge (arguably) best suited to control risk is incapable of doing so, and yet, however unreliable, must be relied on - a situation Urry (2000: 174) describes as a 'hazard' in and of itself. Although individualisation has been criticised for its claims to newness, as well as for downplaying the sociality of risk and the ongoing significance of class, gender, ethnicity and other social institutions (e.g. Caplan, 2000; Hanlon, 2010), it has also been suggested that it may be the 'most important' aspect of Beck's risk thesis (Lash, 2001: vii).

Whilst some of the principles underlying individualisation have been considered in the contexts of transport behaviour (e.g. Scheiner, 2006), the potential realisation of 'sustainable mobility' (Essebo and Baeten, 2012) and cycling as a responsible transport choice (Aldred, 2010 and 2012; Green et al, 2012; see also below on citizenship), the individualisation of transport policy has largely evaded examination. Indeed, contra or in spite of individualisation (as well as informationalism, see next section), the 'classic institutions' of transport continue to dominate research perspectives on policy actors as (representatives of) expert systems, particularly the state, but also consultancies and other professional or civil society organisations (e.g. Marsden et al, 2011; Marsden and Stead, 2011). Beyond transport, similar framings exist within other literature concerned with the transfer or mobilisation of policy (e.g. Cochrane and Ward, 2012; Dolowitz and Marsh, 2000; Wolman and Page, 2002). Even McCann (2008: 14), who recognises that policy mobilities involve 'a much wider range of expertise [...], practices, and representations, than has generally been acknowledged', and who (2011: 113) is critical of 'practice and process-oriented' policy literature for limiting itself to narrow typologies of policy actors, stops short of including individual members of the public in his own expanded framing. Individual members of the public instead tend to be relegated to the position of relative non-actor; passive policy consumers (e.g. of the 'lived experience of transport', Rajé, 2007); or indeed, dependents or 'policy subjects' (Peck and Theodore, 2010: 172) of the socalled 'main actors' (Banister, 2008: 76) or 'policy elite' (Vigar, 2002: 2).

(Sub)Politics

Individualisation, reflexivity and the changing nature of risk itself are meanwhile said to correspond to a political shift, from what Beck (1995) refers to as class to ecological politics or the 'politicisation of risk', and from what Giddens (1991a: 157) refers to as emancipatory to life politics (or 'politics of inequality' to 'politics of self-actualisation')(Ekberg, 2007). In both cases, the idea is that there is a shift from 'the old stalwarts of class and economic privation' (Hanlon, 2010: 211) to those 'oriented towards promoting a better quality of life, reducing risks to health and the environment, assessing the impact of emerging technologies on society and ensuring the safety, security and survival of life on earth' (Ekberg, 2007: 357; see also, for example, Pichardo (1997) on new social movements). Heightened awareness of risk is said to exacerbate individuals' sense of insecurity, prompting them 'to demand action to protect their seemingly threatened way of life' (Hanlon, 2010: 214). A want of 'absolute security' drives people to develop a 'highly sensitized sense of entitlement' to it; they have been 'promised the impossible', and so demand it in turn (Isin, 2004: 232-233). Scientific and technological progress - once largely assumed and 'non-political' in the name of wealth-creation - is now understood not to be guaranteed, nor politically-safe as expert claims become more challengeable and susceptible to political struggle (Holzer & Sørensen, 2003; although see Wynne, 1996; see also next section).

Rather than 'become political in the strict sense of the word' (Holzer & Sørensen, 2003: 81) however, there is, Beck (1996: 18) argues, a growth in the *subpolitical*, or 'politics outside and beyond the representative institutions of the political system of nation-states'. That is, in addition to the public making their risk-related demands known in increasingly *individualised* ways, they are also doing so via alternative channels (given that 'the traditional routes of the formal political system' are not a trusted means of 'satisfactorily express[ing]' their concerns (Mythen, 2007: 798)). Thus just because engagement with 'formal politics' may appear to be declining does not mean that the public are politically-disengaged. On the contrary, citizens are said to be acting via 'self coordination and direct action' (Mythen, 2007: 798) and as such, the growth in subpolitics 'begs investigation' (Mythen, 2007: 804); is one the suggested 'researchable issues and future applications' (Mythen, 2007: 804) of the risk society thesis.

This would seem particularly true given that Beck's (1996) idea of *subpolitical actors* lean towards those who are instituted, although he does not seem to recognise them as such. For example, he refers to Greenpeace and other non-governmental organisations, whose direct action tactics highlight the weakening 'power and credibility of institutions' (Beck, 2008b: 95), but the possibility that such non-governmental organisations are *themselves* instituted and may *also* be weakening goes unacknowledged by Beck, hence suggesting opportunities to investigate the intersection of subpolitics and individualisation. Indeed, in terms of mobility, transport and cycling, the suggestion here is that existing studies tend to concern themselves more with politics, rather than *sub*politics; institutional and formal relations, rather than the *self*-coordinated actions relating to transport as a lifestyle and quality of life issue (e.g. Beckmann, 2004; Spinney, 2009; Vigar, 2002, although see below discussion on citizenship and transport, and for example, Blickstein and Hansen (2001) and Furness (2007: 313) on the collective but subversive Critical Mass).

Citizenship

Underlying subpolitics is the notion of *citizenship*, which is widely recognised to have evolved beyond the territorial and institutional confinements of the nation-state, as well as beyond inherited or socially-predetermined rights and responsibilities (as related to class, gender, ethnicity and marital status) to encompass new scales, sites, acts and actors, as well as an expanding notion of rights and responsibilities (Isin, 2009; Urry, 2000). 'How subjects act to become citizens and claim citizenship has thus substantially changed' (Isin, 2009: 367), from being confined to nation-state membership (Marshall,1950) to more mobile practices, such as for example, blogging and the use

of other 'new media and social networking as sites of struggles' (Isin, 2009: 367), through which individuals demand what they claim to lack (i.e. exercise their right to claim rights), rather than act based on what they already have or were born into (i.e. wealth, property, white skin, manhood). In order to better understand these dynamics - citizenship as *process* rather than *state* - Isin (2009: 368) calls for more 'fluid' conceptions, whilst likewise Urry (2000: 167 and 173) argues that the ongoing legitimacy of the 'citizenship as stasis' model is limited as 'new hazards, rights and duties', as well as evolving socio-spatial contexts, give rise to new and emerging 'citizenships of flow', such as ecological, consumer and mobility citizenships.

In terms of (everyday) transport and citizenship, although there has (arguably) been 'little work' (Aldred, 2010: 37), automobility has received the most attention. Sheller and Urry (2000: 739) argue that automobility has 'reshaped citizenship', including by altering the public sphere and what is considered 'necessary for an appropriate citizenship of mobility' (Urry, 1999: 2). As such, automobility has been linked to consumer and ecological citizenships, their rights and responsibilities (e.g. Batterbury, 2003; Freudendal-Pedersen, 2009, see also below). Public spaces, as sites of citizenship, are recognised to have become spaces built for and around automobility, so that 'those without cars or without the 'licence' to drive them (Sheller and Urry, 2000: 754) are effectively excluded from these 'civil societies mobilised around automobility' (Urry, 1999: 3; Wickham, 2006). Whilst such framings are commonly understood in relation to those walking and cycling (e.g. Aldred, 2010), Packer (2008: 13) draws attention to less obvious marginalised mobile groups (e.g. motorcyclists, hitch-hikers, lorry drivers) whose own freedom of movement, he argues, became regulated or governed in relation to the development of the twentieth century's 'idealized social order' characterised by unrestricted private automobility. Automobility is, in other words, an 'enemy' of citizenship (Sheller and Urry, 2000) for some, whilst a ticket to it for others, creating a situation whereby, in relation to automobility, people - drivers included - compete 'for scarce space and recognition' and do not recognise each other as 'fellow[s] with commonly shared rights and obligations' (Gartman, 2004: 193).

There has however been 'even less' work on cycling and citizenship (Aldred, 2010: 37; although see Batterbury, 2003). Addressing that gap, Aldred (2010: 49-50) argues that different transport

⁵ See for example Rainie and Wellman (2012: 197-198) on Peter Maranci, who, following unreciprocated attempts at engagement with railway officials, politicians and the mainstream media, 'ran a campaign against' the Massachusetts Bay Transportation Authority by blogging about (including posting photographs of) the problems he saw when commuting - dirty and overcrowded stations, late trains and uncomfortable carriages. Although Maranci was not alone (his blog linked to others that also documented railway commuter experiences), nor does he claim it was because of his blog that changes were made 'within the transit system', he does believe that it brought dissenting voices to the attention of other commuters, railway officials (who made adjustments to staff and station operations corresponding to some of Maranci's complaints) and the mainstream media (Maranci was contacted by a local reporter for an interview and photo shoot in the local commuter newspaper).

modes, the different public spaces they occupy and the different types of social interactions they inspire influence the ways in which citizenship is enacted. Based on data from Cambridge, UK, she concludes that cycling is a means of enacting four dimensions of 'cycling citizenship': 'the environmental citizen, the self-caring citizen, the locally rooted citizen and the citizen in the community'. Building on this work, Green et al (2012: 272, 273 and 277) find that for some in London, driving has been discredited as 'morally dubious' whilst cycling is lauded - empirical evidence of cracks in understandings of the promises of automobility (see also Lupton (2006: 14) on the 'moral enterprise' that is individualised risk avoidance; Beck (1996: 20) on morality 'gaining priority' over expert reasoning in late modernity). Both studies could be interpreted as evidence of an emergent 'reflexive mobility paradigm' (Beckmann, 2001a: 604) and indeed, 'reflexive citizenship' (Green et al, 2012: 273). They may also be seen to demonstrate modal choice as a lifestyle choice and an attempt to personally (individually) take responsibility for risk: 'the cycling citizen represents a response to contemporary social problems and strains' (Aldred, 2010: 50); the 'new citizen' [is] a knowledgeable and alert risk-assessor' (Green et al, 2012: 272 and 273). In both studies, citizenship is understood to be physically enacted, whilst its responsibilities (as opposed to rights) are the main focus (see also Aldred (2012) on cycling and the 'responsible citizen' and Lupton (2006) on the voluntary risk-avoidance practices increasingly required of self-regulating 'good citizens'). There remains however a need to examine the claiming of individuals' mobility (transport) rights given the 'small slivers of public space' (Sheller and Urry, 2000: 739 and 754) to which 'relatively disenfranchised' cyclists, pedestrians and 'others not-in-cars' are often confined (see Batterbury (2003) on a sense of 'environmental citizenship' prompting some to respond 'to injustices and deficiencies in urban transport' and claim their right to cycle as environmentally safer and more efficient transport).

Moreover, there is a need to examine how transport-related citizenship is practiced or enacted not just via localised physical movement but also via *multiple* other forms and scales of mobility, including possibly, whilst remaining *physically* immobile. As Hanson noted back in 1998 (241), how the public engages in civil society has changed due to developments in information and communication technologies; previous understandings of life 'on the road' (i.e. 'a necessary condition for being connected') and 'off the road' (i.e. characterised by 'insularity and stagnation') have been 'inverted'. As such, the 'traditional focus' of transportation geography as 'the movement of people as goods' needs, she argue, to be expanded accordingly (i.e. to take communication into account, see previous section). So, whilst relatively little attention has been paid to the enactment of citizenship via transport, even less is known about how claiming *the right* to certain forms of transport as a matter of lifestyle choice is being exercised through *other forms of mobility* with which transport is highly-interconnected. In short, whilst making sense of citizenship in late

modernity does indeed entail 'taking mobility seriously', as Green et al (2012: 273) suggest, taking mobility seriously entails taking into account more than just physical movement.

Risk Section Summary

In this section, risk and particularly, Beck's *risk society*, are considered in relation to transport, with three main biases or gaps in the literature apparent: 1) neglect of cycling in a risk society context 2) neglect of uninstituted, individualised and informal transport politics, policy actors and practices of reflexive mobility (due to privileging instituted ones) 3) neglect of transport citizenship as it is enacted via means other than physical mobility. As has been alluded, the mobility of information and communication is central to attempts at understanding and mitigating risk in late modernity, and as such, *knowledge* is the subject of literature discussed in the next and final section of this chapter.

2.3 Knowledge

Expert Knowledge as Uncertain, Distrusted, Conflicted

Another key element of the risk society and reflexive modernisation theses is *knowledge*, whereby 'to know', more than ever does not mean 'to be certain' (Giddens, 1991a: 40). 'There can be no certainty, the sciences [...] are irrevocably confronted by the end to their alleged certainties' (Fuchs and Hofkirchner, 2005: 245). Heightened awareness of the *impossibility of perfect knowledge* is the essence of reflexivity (Beck et al, 2003; Ekberg, 2007; Lash, 2001; see previous section). Not unlike the paradox of modernity, and indeed as constitutive of it, the expansion of scientific knowledge is understood by risk society theorists to mean *less*, rather than *more* security and control: 'the equation of knowledge with certitude has turned out to be misconceived [...] the thesis that more knowledge about social life [...] equals greater control over our fate is false' (Giddens, 1991a: 39 and 43).

Indeed, the 'key problem' in the transition from first to second modernity is, according to Beck (2008b: 125), less about knowledge as it is *gaps* in knowledge or *unawareness*, which result in unintended consequences, including those relating to modern transport. Indeed one obvious example is the 'predict-and-provide' model, whereby new road infrastructure is provided based on predicted demand for car use. Predict and provide was the accepted wisdom for much of the latter half of the twentieth century in the UK and elsewhere (Golbuff and Aldred, 2011; Urry, 2008), until awareness of its fallibility (i.e. encouraging rather than controlling car use), combined with the fallibility of automobility itself (i.e. social and environmental risks), led to a 'noticeable shift away'

(Urry, 2008: 347; Vigar, 2002) from it. What we do *not* know is therefore continually being revealed through 'more and better knowledge', which therefore becomes the 'source of new risks' and new 'spheres of action' (Beck, 2000: 216). In other words, 'an increase in knowledge results in an increase in ignorance' (Ekberg, 2007: 356); science is producing 'more and more knowledge, but it is also producing an ever greater lack of knowledge' (Beck and Lau, 2005: 528); 'knowledge creates non-knowledge' (Fuchs and Hofkirchner, 2005: 256); knowledge-based societies *are* risk societies (Fuchs and Hofkirchner, 2005). As such, the crucial question Beck (2000; 2008b) argues, is how do we deal with this unawareness, with not-knowing, with our 'inability to know'?

For one thing, knowledge itself is said to become more *conflicted* (Beck, 2008b). In first modernity, the science and technology underlying what would eventually become identified as 'risks' was, Giddens (1998: 31) argues, more 'external' to the lives of most people and hence less likely to be publicly challenged and politically debated (although see Wynne, 1996). It was, in other words, relatively *immobile*. 'Knowledge was enclosed within professional boundaries, and gaps in knowledge were denied, repressed, ignored or dismissed' (Ekberg, 2007: 355). In terms of transport, for example, Beckmann (2004: 96) refers to road safety experts as 'somehow remain[ing] outside' the 'actor-network of traffic'; 'untouched by the mobility and mutability of other agents', whilst as a discipline, transport science is characterised by tools and interpretations presented as "transport solutions', free from side-effects or feedback' (Beckmann, 2004: 84). According to Giddens (1991a) meanwhile, the public's ignorance was a condition of its faith or trust in modern expert systems. Trust is, in other words, 'a substitute for knowledge' (Ekberg, 2007: 356); where there is a void in knowledge, trust (in expert and by extension abstract systems) is a source of security (i.e. 'trust is only demanded where there is ignorance' (Giddens, 1991a: 89; Giddens and Pierson, 1998)).

That trust is believed by some to unravel in reflexive, second modernity (as noted in the previous section) as a heightened awareness emerges of the areas of ignorance that 'confront the experts themselves' (Giddens, 1991a: 130). Correspondingly and paradoxically, the status of knowledge rises in importance. A 'well-distributed awareness' of risk is said to emerge; 'many of the dangers we face collectively are known to wide publics' (Giddens, 1991a: 125); 'knowledge of the consequences of industrial modernization [now exists] even on the lowest rungs of the ladder of social recognition' (Beck, 2005: 350). Such awareness has, in other words, since first modernity, become more *mobile*. As such, the public's relationship with science and technology is thought to be 'much more dialogic or engaged' (Giddens, 1998: 32); 'individuals now place a greater emphasis on seeking information about available options' (Ekberg, 2007: 355); widespread awareness of the uncertainty of knowledge opens its own floodgates; it 'opens up a battleground of pluralistic rationality claims' (Beck, 2005: 350), a 'plurality of heterogeneous claims to knowledge'

(Giddens, 1991a: 2) made by 'an enlarged [...] horizon of [...] agents, producers and interested parties [competing] for knowledge' (Beck, 2005: 350). At the heart of these conflicts - 'what is at stake' - Beck (2005: 350, emphasis mine) argues, is the politicisation of modernity and for some, the objective to *defend*, and increasingly for others, to *overcome*, 'institutional expert constructions of the inability of others [...] to have knowledge' regarding the unintended consequences of modernity.

First modern societies are, moreover, said to have evolved based on a highly-rationalised 'mechanistic paradigm' (Fuchs and Hofkirchner, 2005: 245), or the prioritisation of *scientific* knowledge thought capable of 'eventually perfect[ing] the control of nature' and resulting in 'a unified picture of the world' (Beck et al, 2003: 4 and 17). Non-scientific knowledge (e.g. 'tacit knowledge, intuitive and experience-based knowledge, local contextual knowledge', Beck and Lau, 2005: 538) was correspondingly 'devalued' and there emerged a 'hierarchy between experts and laymen [...] grounded on the monopoly of knowledge by professionals' (Beck et al, 2003: 4; Wynne, 1996). Within this hierarchy, claims to knowledge were judged, with those that 'deviated from the norm' generally 'excluded as illegitimate' (Beck and Lau, 2005: 543).

As reflexive modernisation set in however, the suggestion is that the assumptions underlying this model began to 'lose their obviousness and persuasiveness' (Beck et al, 2003: 16) and ultimately, are 'refuted' (Beck et al, 2003: 17). In terms of transport, Beckmann (2004: 96) argues, these changes jeopardise the 'elevated' position and disconnectedness of transport science: 'Previously uncontested expert knowledge is put into question [...] No longer can the traffic safety expert remain aloof [...] The increasing openness of safety solutions undermines the static position of expert knowledge and exposes the expert to the moving forces of the actor network of traffic [...] [where] the position of the expert is no longer fixed'. A 'plurality of rationalities' emerges ('even if one of them is still declared to be indispensable')(Beck and Lau, 2005: 543). Non-scientific claims to knowledge are thought to have become less marginalised as 'science is no longer seen as being solely responsible for generating valid and useful knowledge' (Beck and Lau, 2005: 544). In other words:

To the extent that this erosion of the bases of certainty is publicly recognized, space is opened up for alternative forms of knowledge to come into play. In retrospect, these might always have been at work latently justifying actions and decisions. But they could not previously be used as public justifications. They were considered illegitimate as long as they could not be squared with the dominant model of rationality. The result [...] is a situation in which there is no longer 'one best way' to solve every problem, but rather several equally valid modes of justification that operate simultaneously. Such a loosening

up of the foundations of rationality could lead to a multitude of alternative optimization strategies and/or to an expansion in scientific and technical knowledge [...] The boundaries of knowledge – that is, the boundaries between scientific and unscientific, between science and politics, and between experts and laymen – have now been drawn in several places at the same time. So the conclusion of a dispute over what counts as knowledge can no longer have the same finality [...] perspectives once considered illegitimate have won recognition and importance (Beck et al, 2003: 16 and 20).

How Knowledge is Produced and Who Produces It

Two⁶ criticisms of the above framework are especially notable here because of the ways they are reflected in research on transport and cycling. Firstly, the *social dimension of knowledge production* is said to be neglected by risk society theorists whose pre-occupation with *individuals* loses sight of the enabling (rather than constraining) tendencies of shared practices and social structures that *influence* individuals and hence knowledge production: 'knowledge becomes knowledge through our acceptance of it - by our ability to view it as knowledge and thereby legitimate it' (Hanlon, 2010: 216). Put another way, 'collective, public knowledge - and [...] corresponding public order - which could arise from the informal non-expert public domain are inadvertently but still systematically suppressed' from prevailing risk society conceptions of reflexivity, which are largely 'restricted to the interpersonal and intimate' (Wynne, 1996: 46).

In terms of cycling, such tendencies are reflected in research that conceptualises the lay public's cycling-related transport knowledge as *physical movement itself*; *experiential*; rooted in *individual experience*; the practical skills required to move oneself and/or one's vehicle. For example, in stating that cycling in London 'requires knowledge' Green and colleagues (2012: 282) take 'knowledge' to mean the skills necessary to efficiently move body and bike (e.g. how to purchase and maintain a bicycle; to strengthen, balance, cleanse, assert, protect and appropriately dress the cycling body; to be an 'alert risk- assessor' whilst cycling). Similarly, Aldred (2013: 259) argues that people who cycle in the UK - in order to cycle in the UK - are 'often expected to possess a higher level of knowledge [and] skills' than other mobile groups (see also Spinney, 2008 on cycling 'enskillment'). 'Mobility knowledge', including 'cycling-knowledge', is likewise for Jensen (2006: 160-161) acquired and articulated through (physical) 'mobility practices', which entail the use of various 'mobility codes' (e.g. 'walking-codes and 'cycling-codes'), beginning from the moment a

⁶ A third main criticism is that the *historical grounding* of Beck and Giddens' analyses is weak, as it fails to acknowledge that expert systems and the knowledge they impart 'have long been politicised' (Hanlon, 2010: 214); people have never been 'as trusting of professionals as Beck assumes' (Hanlon, 2010: 215). Any 'lack of overt public dissent [...] towards expert systems' on the part of early modern individuals could be explained by 'dependency, possible alienation, and lack of agency', Wynne (1996: 52) argues, and thus should not be taken for granted to imply trust in them.

child is taught to 'take care in the traffic'. Such foregrounding of physical movement as *the* means by which individuals make sense of transport and cycling has however come at the expense of investigating their other, more abstract or conceptual understandings of transport, as well as *other methods* used to produce and acquire it (more on which below).

Secondly, perhaps the greatest issue taken with Beck and Giddens' analyses of knowledge is their 'almost exclusive focus on expert knowledge' (Wynne, 1996: 44 and 46) without paying attention 'to the question of how the category of 'expert' is defined and bounded' and correspondingly, to the *lay public's role* in politicising and shaping the knowledge experts impart. Their 'concentration on the formal and institutional' is, according to Lash (in Beck et al, 1994: 200, emphasis mine), 'at the expense of the increasing proportion of social, cultural, and political interaction [...] that is going on *outside of institutions*'; 'their conceptions of sub-politics or life-politics focus on the experts with relative neglect of the grass roots', 'politics and everyday life' or those who are 'outside' expert systems - all which is rather ironic given that sub- or life-politics are precisely characterised as taking place 'outside' of (indeed 'below') formal arenas, as people 'challenge the expertise of regulatory institutions in risk-sensitive areas', such as transport, as Mythen (2007: 803) suggests.

That is, despite Beck's (Beck et al, 2003: 20) suggestion that previously 'illegitimate' forms of and claims to knowledge have, in second modernity, 'won recognition and importance' (whilst faith in expert knowledge is believed to have simultaneously diminished), he does not, Hanlon (2010: 216) argues, 'adequately analyse' how the lay public constructs *its* claims, thus leaving his notion of subpolitics 'devoid of real struggle and power'. The 'politics of expertise runs deeper than Beck allows', Hanlon (2010: 217) continues, and can only be understood when the experiences and struggles of the lay public are accounted for: 'Expertise is actually created via [...] expert-lay debates and practice in an attempt by some groups to commandeer a place at the expert table [...] expertise is shaped by wider ontological struggles which the lay public are involved in (even if this is often indirectly) and lay knowledge is always involved'. To take their debates, practices and knowledge into account would be to recognise 'agency in the lay population and hence social conflict' (Hanlon, 2010: 218).

In terms of research into cycling, the suggestion here is that *entire knowledge networks* are being overlooked. Following risk society logic, knowledge about transport policy should be more debated, conflicted and open to alternative claims and types of knowledge and knowledge-actor than ever before. And yet, understandings of transport policy remain largely framed in relation to instituted and expert actors' knowledge in isolation from, and to the neglect of, the public's. This gap in the literature may be a reflection of a gap in practice, which Rajé (2007) found to exist on several levels (i.e. communication gap, consultation gap, experience gap) between users of transport

systems and those who plan and design those systems in the UK. Whilst somewhat similar claims were made in the previous section regarding reflexive mobility, individualisation and (sub)politics, what is at stake here is the *knowledge* emanating from those practices and the neglect of uninstituted, individual members of the public as *knowledgeable actors in their own right*.

Informationalism and Knowledge-based Societies

One way of conceptualising knowledge production in late modernity is online. Prior to the development of the World Wide Web and widespread internet use (both of which the risk society and reflexive modernisation theses pre-date), earlier scholarship recognised signs of something resembling their ultimate emergence. Perhaps most notably, Bell (1973) identified a knowledgebased 'post-industrial society' in the making, founded in part on the 'rise of a new intellectual technology', which although reliant on computers, was considered unconventional at the time in relation to 'usual understandings of technology as physical, as to do with tools or machines' (Waters, 1996: 111). The 'electronic network of networks' (DiMaggio et al, 2001: 307) - the internet - and the information and communication technologies (ICTs) it supports, have changed the nature of information, which, amongst other things, is more mobile and less dependent on physical movement (overcoming time and space) to be delivered (see section 2.1). The internet is the 'backbone' (Castells, 2010: 375) of internet- or computer-mediated communication (CMC), constituting 'the whole range of cultural expressions conveyed by human interaction' (Castells, 2009a: 55), to the extent that virtuality has become a fundamental dimension of reality - the culture of real virtuality (Castells, 2010: 355). Indeed the 'technology of knowledge generation, information processing, and symbol communication' has become the primary source of productivity in late modernity, according to Castells (2010: 17). Whilst knowledge and information were of course crucial to other (agrarian and industrial) modes of development, what differentiates informationalism is the importance of the 'action of knowledge upon knowledge' (rather than upon mostly nature and/or manufacturing) enacted through a new information-based technological paradigm; 'it is the pursuit of knowledge and information that characterizes the technological production function under informationalism' (Castells, 2010: 17); knowledge 'supplant[s] land, labour or capital as the dominant factor of production' (May, 2011: 253).

This 'rise of knowledge as a strategic resource in all social fields' (Fuchs and Hofkirchner, 2005: 254) corresponds to the emergence of what we have come to call *knowledge-based societies* (see also section 3.1), characterised by scientific and technological knowledge, its associated industries, labour force, emphasis on innovation and expert knowledge and ultimately, awareness of risk and the fallibility of that expert knowledge (Fuchs and Hofkirchner, 2005). Moreover, because *knowledge implies responsibility* (which is believed to have become more individualised,

see previous section); because knowledge is not 'value-free' but comes with 'ethical implications', the 'main task' of knowledge-based societies is, according to Fuchs and Hofkirchner (2005: 256), 'to solve our global social problems', including arguably, transport⁷ (see also Beck, 1999).

The Internet as a Self-Organising System

Solving problems, gathering information, communicating, learning and generally meeting social needs were meanwhile previously and primarily tackled through the resourcefulness of hierarchal organisations and/or small, densely-knit and proximate social groups (e.g. family, neighbours, schools, churches)(Rainie and Wellman, 2012). Media such as books, newspapers and radio were/are generally not thought of as problem-solving 'tools' per se because they cannot *interact* with and be *adapted* to individual circumstances (Rainie and Wellman, 2012). Indeed, what is 'transported' and stored via such media is, according to von Foerster (1999), not information per se, as that 'would imply that sender and receiver have the same information after the communication process has taken place' (Fuchs and Hofkirchner, 2005: 243). Rather, it is data, symbols or 'potential information' - the main difference being that information is characterised by interpretation or 'active construction' (Fuchs and Hofkirchner, 2005: 243 referring to the work of von Foerster, 2002, emphasis mine). A pioneer in the field of *self-organising systems*, von Foerster argued that such systems continuously *interact* with and *adapt* to their environments.

At this most basic level, the notion of self-organising systems has taken hold across disciplines, been expanded and its variants dubbed theories of non-linearity, chaos and complexity, amongst others. In the social sciences, the result has been 'yet another turn, the complexity turn' (Urry, 2002b; 2005: 1), whereby attempts to understand the social world (like the natural one, from the study of which 'complexity thinking' originates) place greater emphasis on *process*. Indeed internet and communication scholars Castells (2000), Fuchs (2008) and Rainie and Wellman (2012) have all suggested the utility of complexity thinking for better understanding the networked character of the internet and late modern social life.

Expanding on the fundamental characteristics of *interaction* and *adaptation*, complex self-organising systems - such as the internet and automobility - are understood to be 'open' in the sense that they tend to lack a centralised governing structure, instead developing 'collective properties or patterns' (Urry, 2005: 5) - 'emergent structural change' (Fuchs and Hofkirchner, 2005:

⁷ Indeed both Fuchs (2008: 141) and fellow internet and communication scholar Shirky (2010: 38-39) refer to transport as a 'problem', with Shirky arguing that although transport 'doesn't seem at first glance to be related to media', it may be improved through ICT use. Fuchs meanwhile concludes that although ICTs have the potential to reduce the need for commuter transport ('a problem'), that potential has not yet been realised.

243) - over time and iteration, as components interact with and adapt to their respective environments, which are themselves in constant flux as they too are interacting with and adapting to their own respective environments, and so on⁸. A self-organising system, in other words, 'changes its internal state in response to environmental stimuli' or external elements (Fuchs and Hofkirchner, 2005: 243), the 'common result' (Fuchs and Hofkirchner, 2005: 244) of which cannot be foreseen; it is contingent and thus may appear to be spontaneous, although is not entirely unstable: 'Order and chaos⁹ are in a kind of balance where the components are neither fully locked into place but yet do not fully dissolve into complete instability or anarchy [...] there is an 'orderly disorder'' (Urry, 2005: 8), an 'order from noise' (Fuchs and Hofkirchner, 2005: 243). Any semblance of pure stability is thus deceiving ¹⁰ as there is an inner logic continuously at work in these systems, which means that even seemingly unrelated and/or micro-level elements make a difference, although any resulting systemic properties cannot be reduced or explained as such: 'the process of emergence cannot be fully forecast by taking a look at the elements and their interactions' (Fuchs and Hofkirchner, 2005: 245).

Exemplifying this point, Urry (2008: 348) notes that, like the internet, which 'came from outside the 'system', so the tipping point towards the 'post-car' will emerge unpredictably from an array of [actors] not currently a centre of the car industry and culture'; Castells (2010: xxi) notes that the global financial crisis is irreducible to any one institutional or individual action; Bauman (in Gane, 2004: 21) argues that the 'flow' characteristic of late, 'liquid' modernity 'means a continuous and irreversible change of mutual position of parts that [...] can be triggered by even the weakest of

⁸ See Urry (2005: 3) who likens the perpetually-evolving non-linearity of such processes to 'walking through a maze whose walls rearrange themselves as one walks through; new footsteps have to be taken in order to adjust to the walls of the maze that are adapting to each movement'. Similarly, see Bauman (in Gane, 2004: 21) who suggests how the laboratory conditions of his own psychology education - reflective of the mid-twentieth century modernity during which he was being taught - may be adopted to reflect the conditions of late modernity by asking: 'what 'if the maze were made of partitions on castors, if the walls changed their position as fast, perhaps faster yet than the rats could scurry in search of food, and if the tasty rewards were moved as well, and quickly, and if the targets of the search tended to lose their attraction well before the rats could reach them, while other, similarly short-lived allurements diverted their attention and drew away their desire? No such setting occurred to the behaviourists running the laboratory, and in the world of half a century ago it would have been indeed bizarre if it had'.

⁹ Although Beck 'does not use this sort of language', 'regularizable' and 'totally normal' chaos are implicit in his *individualisation* thesis, Lash (2001: viii, xi, xii) argues, as individuals have become the 'point of passage', through which system feedback loops, ultimately either reinforcing existing systems or supporting the emergence of new ones. Human intervention can, in other words 'increase the possibility that certain paths will be taken and that others will be avoided' and that such feedback increasingly 'passes through the individual' (Lash, 2001: viii; see also Chapters 6 and 7). Giddens (1991a: 153) meanwhile speaks of the constant ordering and reordering of social relations being the result of late modernity's reflexive character. That is, a continual influx of sociological knowledge rejoins (*interacts* with) its subject matter, hence re-organising (*adapting*) it (although, as indicated earlier in this section, Giddens (1991a: 15) tends to emphasise the 'top-down' direction of these processes, rather than the politicisation and production of knowledge by lay publics interacting with and altering expert systems from the 'bottom-up').

¹⁰ As Giddens (1991a: 53 and 139) puts it, late modern life is 'more like being aboard a careering juggernaut' than 'a carefully controlled and well-driven motor car' [...] 'while it sometimes seems to have a steady path, there are times when it veers away erratically in directions we cannot foresee'.

stresses'. 'No phase of societal development' will last forever (Fuchs and Hofkirchner, 2005: 244), including the system of automobility, the evolution of which Urry (e.g. 2004, 2008) along with Dennis (Dennis and Urry, 2007, 2009) have contributed to in particular. Ultimately the emergence of new systemic properties stems from *the interpretation of difference*: the system 'produces a difference within its own material foundation by establishing a relationship to an external difference' (Fuchs and Hofkirchner, 2005: 243).

Self-Organisation, Knowledge Production, Knowledge (Sub)Politics

Combining complexity thinking with knowledge production, Fuchs and Hofkirchner (2005) argue that knowledge is a 'process and relationship' between human actors who co-ordinate their individual (i.e. subjective) knowledge via three phases (cognition, communication and cooperation) so that societal (i.e objective) knowledge emerges. That is, information results from 1) individual interpretation or active construction (cognition), 2) that connects to the information of others (communication) 3) and may, under the right conditions (cooperation), result in the emergence of 'jointly produced resources' (Fuchs, 2008: 131) or knowledge, as a 'manifestation of information' (Fuchs and Hofkirchner, 2005: 241). In other words, knowledge is in this sense understood to be the 'common result' or collective property emerging from the *interaction* and *adaptation* of informational elements. In contrast to those (such as some researchers of cycling, see below) who take knowledge to mean 'human capacities or practical information' (Fuchs, 2008: 114), Fuchs and Hofkirchner (2005: 241) (like most information science researchers) understand knowledge to be the 'manifestation of information in the social realm' (see also Chapter 6).

Whilst Fuchs and Hofkirchner (2005: 254-255) allude to the role of 'knowledge-based technologies' and 'the computer' (i.e. the 'medium of the time-space distanciation of communication') in producing knowledge, it is only in later work that Fuchs (2008) actually applies their model to the internet. In contrast to other media, the interactive affordances of the internet and the information and communication technologies it supports enable its users (all of whom are all potential information producers and consumers) to 'permanently re-create' it as a self-organising sociotechnical system (Fuchs, 2008: 122; Bruns, 2007). The 'order' of the internet system, in other words, 'emerges due to communicative synergies [...] without meaningful communicated information it is not self-organizing' (Fuchs, 2008: 125). Moreover, the internet system's microelements (e.g. one piece of information) can, under the right circumstances (i.e. it being communicated and developing collective synergies), result in new collective properties (e.g. knowledge as the manifestation of information) (Fuchs, 2008). That said, these processes depend on an open-source 'ethos of cooperation, public goods, and shared knowledge', which, according

to Fuchs (2008: 133), is evident in wikis¹¹ although otherwise is rare despite its potential to proliferate online in theory - a claim the evidence discussed in section 6.2 later challenges.

Given the said decline of the nation state and primary social institutions, coupled with everincreasing ICT use and knowledge having become the primary source of productivity in late modernity, it is hardly surprising that some scholars have identified the growing importance of the latter two to (sub)politics (Mythen, 2007). That is, in addition to knowledge itself becoming more conflicted (mediated in part by ICTs), conflicts have become more knowledge- and ICT-based. Leach and Scoones (2007: 17), for example, identify knowledge politics as a key theme in their review of the social movements literature: 'we can see this tendency for social and political disputes to become technical disputes, and for conflicts around resources to be expressed in terms of conflicts around knowledge'. Research into such struggles should be placing knowledge at 'centre-stage', they argue, given its importance to politics, citizenship, identity formation, issueframing and the glueing together of globe-spanning movement networks and solidarities. Castells (2009b) similarly argues that 'a new form of politics' - informational politics - has emerged in late modernity, distinguishable from its predecessors by revolutionary advancements in ICTs and their centrality to our lives. Power relations are, Castells (2007: 258) argues, increasingly rooted in communications rather than institutions, with a new public space 'of communication' having superseded that 'built around the institutions of the nation-state' in industrial modernity. As this transition is still in its infancy, the new communication space - characterised by 'mass self communication' - is 'contested terrain' (Castells, 2007: 258) where opportunities exist to research unfolding power and counter-power dynamics at the beginning of a new age. 'What scholarly research can observe', Castells (2007: 258) argues, is 'a new round of power making' taking place in the new communication space, where 'social movements, individual autonomy projects, and insurgent politics [...] find a more favorable terrain' than via traditional, institutional channels.

In terms of transport and cycling, the suggestion here is that two things remain under-explored 1) the internet/CMC as means by which the public¹² produce, acquire and mobilise knowledge about cycling-related transport policy (although see Rajé, 2007) 2) the system implications of that use. That is, given what we know about the importance of even seemingly small or minor elements to system adaptation, and given that 'inner contradictions' (Fuchs and Hofkirchner, 2005: 244) mean different systems are vulnerable or under stress at any given point in time, what can be said about

¹¹ A wiki is a web application which allows people to add, modify, or delete content in collaboration with others' (Wikipedia, 2014).

¹² Some studies that have considered *institutional* actors' use of the internet to acquire and mobilise policy knowledge regard it with caution, with Hoyt (2006: 224) even describing such use as a 'cause for concern' (see also Marsden et al (2010).

the effects of internet-mediated interaction on expert systems responsible for transport, which the public is critical of? (the subject of Chapter 7)

Knowledge Section Summary

In light of this review of literature relating to knowledge, three inter-related gaps or biases in understandings of cycling become apparent: 1) neglect of the public's abstract or conceptual knowledge about transport (due to privileging experiential knowledge of physical movement) 2) neglect of the public's positioning as knowledgable transport policy actors (due to privileging expert knowledge and actors) 3) neglect of how and why the public use the internet to communicate about cycling-related transport policy and to what effect.

2.4 Chapter Conclusions: Literature Review

This chapter's review of the literature captures the major themes that are taken forward in the remainder of this thesis, which together suggest that indeed, 'it's clear that urban mobility badly needs to be rethought for an age of commuters every bit as networked as the vehicles and infrastructures on which they rely' (Greenfield, 2014). As Hanson already concluded in 1998 (241), researchers interested in transport need to understand how developments in information and communication technologies 'intersect with on-the-road processes, for that is where the most interesting questions lie'.

What has been suggested here is that modern transport is not without its risks; that those risks are ever-increasingly publicly debated, including by those for whom cycling is seen as a transport solution and risk-mitigator. In an earlier era, these individuals would have been less likely to participate in transport policy debates and are more likely to do so now due to changes in social structure, as well as developments in technology that have facilitated the mobility of information and communication. Reflective of that earlier time most existing research was born into, not enough is known about:

- cycling's multiple mobilities, namely that of information and communication about cycling
- cycling as a complex system in the context of reflexive modernity
- the individualisation and subpolitisation of transport policy
- transport citizenship as it is enacted via means other than physical mobility
- the public's abstract or conceptual knowledge of transport

- the public's positioning as policy actors, rather than policy subjects or passive consumers of transport policy
- how and why the public use the internet to communicate about cycling-related transport policy and to what effect

These are the gaps this project aims to address by applying and testing the theoretical frameworks of the risk society and reflexive modernisation theses. Following the next chapter on methodology, which spells out my research questions, choice of method and unit of analysis as 'policy blogging', the subsequent discussion chapters draw on the literature presented here as they explore: motivations for blogging (Chapter 5); blogging and knowledge (Chapter 6); blogging and expert systems (Chapter 7); and the limitations of blogging to make a difference (Chapter 8).

Chapter 3: Methodology

Having established in the previous chapter the gaps in the literature relating to the public's internet-mediated debates about cycling-related transport policy, this chapter outlines the methodology underpinning this thesis; how and why I carried out the research as I did; the rationale and mechanics characterising my approach to data collection and analysis. The first section begins with the justification for blogging and particularly, *policy blogging*, as a worthwhile unit of analysis, as well as London, New York and Paris as primary fieldwork sites. This first section also spells out the questions being asked in this research and why they merit a qualitative approach. The second section goes on to explain the rationale behind conventional *interviewing* as the method best suited to the questions this project is asking, despite its shortcomings and in contrast to 'mobile methods'. The third section discusses the practical details of carrying out the interviews, from recruitment to analysis, as well as describes my positioning as the researcher as it relates to the methodological context outlined throughout the chapter.

3.1 Unit of Analysis, Field Sites, Research Questions, Qualitative Approach

Blogging

'Blogging can be seen as a key sign of our times', Bruns and Jacobs (2006: 5-6) argue, in terms of being a de-centralised, networked and individual-user led practice, distinguishable from the 'industrial, mass media age', of which the producer-distributor-consumer trichotomy ('exemplified perhaps best by [...] Ford') 'extended to manufacturing as the media'. The industrial model characterised by distinct producers, distributers and 'mainly passive and isolated 'end users' (consumers) of media as an informational or symbolic 'good' evolves into one that is more fluid, interactive and 'user-led' (Bruns, 2007: 4). There is in other words, yet another paradigm shift, this one typified by the lowering of barriers and blurring of boundaries between those who produce and consume media (Rainie and Wellman, 2012; see Bruns, 2007 on 'produsage'). Media become more interactive - more social - and information, more mobile.

In terms of blogging - what this first section goes on to propose as this study's unit of analysis¹ - two of the ways that sociality is enacted² is via hyperlinks and comments (see section 6.1). As such, readers (who may also be bloggers) publish comments in response to the content of bloggers (who may also be blog readers) or in response to other readers' comments, and/or cite a blog in content they publish elsewhere online by providing other readers with direct (hyperlinked) access to it. These practices may be compared with those of scholars who, via their own publication channels, critique each other's ideas and reference each other's work in an attempt to build-up knowledge. Indeed like science, blogging and other social media are less about the contributions of any one individual than their interaction with those of others, from which synergies may develop and new knowledge may emerge (Fuchs and Hofkirchner, 2005; see section 6.2).

Much like other social media, blogging is valued for users' candidness and highly subjective and specialised content, rather than its potential mass appeal or purported impartiality (Farrell and Drezner, 2008). In contrast to the institutionally-rooted credibility of broadcast media and impersonality of mass communication more generally, one reason readers trust blogs is precisely because bloggers tend to get personal: 'trying to stay objective is completely irrelevant' (Rettberg, 2014: 101; Jones et al, 2010). Moreover, like users of other social media, it is common for bloggers and their readers to produce content inspired by their observations of, and reflections on, the mundanities of daily life,³ not least for example, commuting, transport, street life, cycling (for example, recall footnote in section 2.2 on the blogging of Boston commuter, Peter Maranci). Indeed, 'blogs record our lives' (Lovink, 2007: 2; Hookway, 2008; Lin et al, 2007). In this way, the analysis of blogging has the potential to shed light on levels of public trust in abstract and expert

¹ Whilst it may be argued that blogging is my case in addition to my unit of analysis ('the most basic element' of a research project, Lewis-Beck et al, 2004: 1158), I refrain from conceptualising it as such for the main reason that, like comparative research (see also this section), I am uncomfortable with the very notion of case study. This is because, like Bryman (2012: 69), I sense that 'almost any kind of research can be construed as a case study' - the risk being that if everything is a case study, nothing is. To label blogging 'a case' would therefore seem to be just that - an exercise in labelling or pigeonholing - whereby the label itself is simultaneously too rigid and vague. That is, definitions of 'case study' tend to emphasise the importance of 'setting [...] boundaries' (Flyvbjerg, 2011: 301) so that a case becomes a 'bounded system' (Stake, 2008: 121; May, 2011: 220) - a notion that does not sit well with the nature of blogging, the new media model, late modernity, fluidity, mobility and the thrust of much of the literature cited in Chapter 2 (not that I am suggesting research boundaries are unnecessary, indeed, on the contrary, see this section). Moreover, and despite this apparent common thread, even the 'most fervent advocates' of case study research acknowledge that the term is marred by 'little specification or discussion of purpose and process' (May, 2001: 220), with attempts to clarify it having resulted in 'definitional morass' (Flyvbjerg, 2011: 302). By referring to blogging as my unit of analysis, I believe that I am being more honest and straightforward than I would be cherry-picking whichever of the many definitions of case study best suit

² The sociality of blogging is also enacted offline, as discussed in section 6.1.

^{3 &}quot;How should we take account of, question, describe what happens every day and recurs every day?" asks the French writer Georges Perec [2008: 204] [...] Perec's point is that everything contains information. It's just that, sometimes, it takes a bit of work to notice it. These days, an audience and a platform can be found for even the most niche interests, as people demonstrate that nothing is truly boring – not if you look at it closely enough' (Ward, 2014).

systems on which individuals are said to increasingly rely (see section 2.2), as well as communication about topics of local relevance: 'Bloggers in large cities for example, often discuss local politics or salient issues that are of interest to other bloggers or readers who reside in that particular locale' (Pole, 2010: 18). Meanwhile, for those elsewhere, who interact with blogs at a distance (from the actual location of the blogger and/or the blogger's localised topic area), blogging can be regarded as a means of connecting localities (see section 6.3); one of many complex and increasingly discursive processes constituting globalisation; one of many 'sense-making activities' constituting the production of place and *cosmopolitanization* (Beck, 2008a: 33; Jones et al, 2010; see also below on comparative research).

Whilst the above traits generally apply to blogging as other social media, two additional ones set blogging apart and further support its analysis in this thesis. Firstly, blogging is differentiated by its accessibility in the sense that some other social media limit access to those who register with or have been invited to join a network (e.g. Facebook, Linked-In), or require the use of application software (i.e. 'apps') and hardware (i.e. mobile devices such as smartphones or tablet computers). That is, amidst an already relatively relaxed media climate, blogging has a comparatively low barrier to entry, the implication being that anyone - connected to the internet - wishing to interact with blogs is readily able. Secondly, blogs are particularly content rich in that they afford multiple tools of expression (e.g. photos, videos, different formatting styles) within a single platform, including virtually endless space for bloggers and their readers to communicate via the written word,⁴ which 'remains central to most blogs' (Myers, 2010: 4; Androutsopoulos, 2013; Herring, 2013). These affordances contrast to, for example, Twitter's limit of 140 characters per tweet⁵ (see section 6.1), Instagram's reliance on photographs and YouTube's reliance on videos. 'Essentially, blogging provides a forum for issues to be discussed in a substantive manner'⁶ (Pole, 2010: 89).

The importance of these characteristics - for the purpose of this research - are thought to outweigh any (arguable) disadvantages of blogging, such as its maturity and hence for some, perceived outdatedness amidst a rapidly-evolving technology environment (most blogs began to appear in the mid-late 1990s). On the other hand, blogging's relative longevity may also be interpreted as a sign of its ongoing relevance. Indeed, Bruns and Burgess (2012: 202) argue that following the move of some users from blogging to more recent communication platforms, what remains is a 'slightly smaller but all the more solidly established blogosphere of engaged and committed

⁴ Describing what writing - and blogging - mean to him as a blogger, Dunckley (2013) states: 'Writing is an excellent method of disciplining and clarifying thoughts and ideas, something that my brain is usually otherwise unable to do fast enough in flowing live discussion' (see also section 5.4).

^{5 &#}x27;I don't know how people can have debates on segregated infrastructure in 140 characters or less' (London blogger John).

⁶ Illustrating Pole's (2010) point and referring to the substantive blogging of one of his peers, London blogger John states: 'He writes these massive essays, they're always engaging, always good to read [and so] try not to do it at work'.

participants'. Likewise, marking the anniversary of the first blog's twentieth year, Naughton (2014) states that 'some of the most interesting writing, thinking and discussion in the world still goes on in the wilds of the blogosphere'.

Policy Blogging

Amongst the infinite possible topic areas about which to blog - *policy blogging* - constitutes one of the 'new arenas of policy exchange' (Peck and Theodore, 2010: 172) and under-researched subsections of the blogosphere (see Isin, 2009 on blogging as an under-researched *act of citizenship* and McCann, 2011: 122 on the analysis of blogging as one method of better understanding the *mobility of policy*). Within it, some blogs focus on *cycling-related transport policy*. They - the unit of this study's analysis - like other policy blogs, represent a minute proportion of the blogosphere (as section 4.4 discusses in more detail), and may be understood in the broad terms outlined above, as well as the more specific ones below. That is, according to McKenna (2007: 209), policy bloggers

focus on one policy area and attempt to 'get the word out' concerning the importance of [it] and policy recommendations [...] Though they are small in number, these bloggers may represent the vanguard of policy, advocacy and a successful niche within the Internet. They have harnessed the Internet to champion their cause, to network with others, to influence political elites, to inform the public, and, perhaps to make real change

Policy bloggers, in other words, attempt to raise awareness of and make a difference to a policy field (e.g. urban transport, immigration) and/or a specific policy within it (e.g. cycling infrastructure, visa legislation). They do this by, for example: keeping up-to-date with policy developments and taking advantage of the medium's affordances to produce a source of regular and critical policy-specific content; monitoring and reporting on the actions of expert systems responsible for the given policy area; warming people up to progressive policy ideas and suggesting them as solutions when opportunities (i.e. events, controversies, crises) strike; hyperlinking to relevant information sources; filtering key debates and concepts; contextualising them with uniquely-spun commentary and analysis; and interacting with other individuals (on and/or offline) who share their policy interest, including possibly representatives of expert systems with policy responsibilities (Bruns, 2009; McKenna, 2007; see Chapters 6 and 7 on the various ways blogging about cycling-related transport policy raises awareness and makes a difference).

Motivated largely by personal (rather than institutional) interests, policy bloggers are 'willing to invest time, energy, reputation, and money to promote a policy' (McKenna, 2007: 211). They 'learn

how to word their argument[s] to gain the most support', developing a sense of which 'words and ideas resonate' and which 'fall flat' (McKenna, 2007: 220). Moreover, some policy areas and actors are more likely to benefit from blogging than others, namely those that otherwise lack opportunities for communication and cooperation due to social norms, the previous media model or the fact that individuals who share a common condition or particular policy-related grievance do not automatically link-up socially (e.g. victims of road danger, the terminally ill, disabled or - as section 5.4 demonstrates - those concerned about cycling-related transport policy) (Diani, 2001). Less likely to interact via policy-related social networks and therefore less likely to mobilise and convert their individual grievances into collective demands, such would-be policy actors are more likely to remain diffuse, isolated and 'mere aggregates' (Diani, 2001: 122; Lin et al, 2007). Ultimately, in the context of this project, the point is that analysing policy blogging will contribute to understandings of internet-mediated communication, knowledge production and the mobility of information about cycling as physical mobility. The next chapter provides more background on the specific policy blogospheres of concern to this project and Appendix A provides some examples of cycling-related transport policy blogs.

Field Sites

Within this blogging context, there is a need to limit scope. To do so geographically⁷ not only helps to address this project's practical limitations (namely time and language) but also to home in on certain potentially problematic situations or circumstances, including, for example, those associated with local transport.⁸ Stake (1995: 16) refers to this as organising or conceptually structuring research around *issues*. His belief is that 'the nature' of individuals and systems is most 'transparent during their struggles', and thus by conceptually structuring studies around issues as situations where 'something may be wrong', researchers are better able to understand struggles (e.g. such as those relating to transport policy, see below and Chapter 5) and hence the social conditions of which they are so telling (Stake, 1995: 16-17). A focus on issues moreover recognises that 'all systems are under some stress', as well as forces attention on the 'pervasive problems in human interaction' (Stake, 1995: 17). That to say, underlying my selection of London, New York and Paris as field sites (the cycling-related transport policies of which some blog about), was an initial identification of two inter-related conditions that 'might be linked in a causal way with

⁷ Location, Bryman (2012: 67 and 68) argues, is commonly used to frame 'a case', even when location is the 'backdrop' of a study rather than the unit of analysis or 'focus of interest in its own right'. That to say, whilst it may not be unusual to conceptualise this project as constituting three case studies (i.e. blogging in each London, New York and Paris), I do not because a) blogging is my unit of analysis and 2) location alone (like other 'topics', such as 'individuals', 'organisations' and 'processes') is 'surely insufficient' to define a case (Yin, 2009: 17).

⁸ See also Rajé's (2007: 62) arguments in favour of more internet-based methodological approaches to transport research in order to reveal and better understand otherwise 'under-recorded' local 'transport issues' and the public's concerns about them.

a specific problematic effect' (Stake, 1995: 18). Both reflect potential issues and struggles associated with *emerging mobility patterns* and *transitioning mobility systems*. The first concerns physical mobility, the second that of information.

Firstly, in terms of transport, in the decade or so leading up to this project the number of daily journeys made by bike in London, New York and Paris more or less doubled, corresponding in each city to an approximate 2% modal share (Mairie de Paris, 2011; NYCDOT, 2012; TfL, 2012b). Following recognition of this shift (see section 4.1), all three cities implemented what may be described as 'path-defying' policies in the sense that they break away from the trajectory of modern transport planning - in some ways born in these very cities - 'to prioritise new transport technologies over old' (Pooley and Turnball, 2005: 89). Moreover, during more or less the same period of time, in these (and other) cities (Brady, 2012; Mairie de Paris, 2011; NYCDOT, 2012; TfL, 2012b), car use or its growth decreased - a 'major historical discontinuity that was largely unpredicted' (Newman and Kenworthy, 2011: 33) - prompting debate about the notion of 'peak car' (Davis et al, 2012; Dennis and Urry, 2009; Goodwin, 2012a; Goodwin and Van Dender, 2013; Kuhnimhof et al, 2012; Metz, 2012 and 2014; Millard-Ball and Schipper, 2010; Puentes 2012; Puentes and Tomer, 2008; Urry, 2008):

In a wide variety of different studies, using different methodologies and definitions, it has been observed that car use per head, or total car traffic, or road total traffic has shown little signs of growth for some years in advanced economies. In some countries, and especially cities, one or more of these indicators have declined in absolute terms [...] the label 'peak car' has been widely used as summary of a debate about whether the long dominant growth in car use specifically has come to an end, is nearing an end, or is turning down, or is only temporarily interrupted. Since a very large part of the policy and planning of transport has been based on forecasts of future growth, the possibilities that car use may grow significantly less, stabilise, or reverse, are of profound importance (Goodwin, 2012b: 5)

Taken together, these trends for increased cycling and decreased driving suggest a potentially 'problematic effect' between existing supply and growing demand in that transport systems 'linger over time', with new ones having 'to find their place physically, socially and economically' amidst structures and practices that are already well-established or locked-in (Urry, 2008: 17; see also summary of section 4.1). Put another way (and as outlined in section 2.1), transport - as with other forms of mobility - is not evenly distributed; the ability of some to physically move is constrained by others'. As such, 'issues' emerge for and possibly between the travelling (and blogging) public, and the expert systems on which the public relies:

The reality of declining car use in cities will have big impacts on the professions [...] The rationale for roads will shift [...] to being much more inclusive of other modes [...] The implication [...] is a paradigm shift in [...] professional understanding[s] of what makes a good city in the twenty first century (Newman and Kenworthy, 2011: 38-39)

America has long created transportation policy under the assumption that driving will continue to increase [...] [but] changing transportation preferences [...] throw that assumption into doubt. Policy-makers and the public need to be aware that [...] current transportation policy [...] is fundamentally out-of-step with the transportation patterns and expressed preferences of growing numbers of Americans (Davis et al, 2012: 3)

Inter-related with these trends and the potential issues they imply is the second condition underlying my choice of London, New York and Paris as field sites: their positioning as *knowledge-based* and hence *risk societies* (Beck, 1999; Fuchs and Hofkirchner, 2005; see section 2.3). Following risk society logic, such designation means that residents of these cities should be characterised by a heightened awareness of (transport) risk and the fallibility of expert knowledge, a sense of distrust in the reliability of expert systems (responsible for transport) and hence increasingly individualised and subpolitical approaches to mitigating (transport) risk. Inseparable to all this is the new media model, the relatively low barriers of which mean that residents of these cities - in addition to changing their modal preferences for physical mobility - are more than ever able to mobilise information *about* physical mobility, to communicate and interact with others about transport and possibly, to develop new, collective knowledge-based properties (see section 6.2). So whilst the first issue is foremost one of potentially *conflictive physical mobilities*, the second is more a matter of potential *knowledge-based* conflicts *about* physical mobilities - between expert systems and the travelling (and blogging) public - resulting from increased information mobility and risk awareness.

Not all issues can however be known in advance and moreover, fieldwork 'regularly takes the research in unexpected directions', requiring the researcher to adapt and 'redefine issues', making too much advance commitment itself 'problematic' (Stake (1995: 28-89). Indeed based on data collected in London (the first site of actual fieldwork), I decided to expand the number of fieldwork sites. The addition of these secondary sites was not however based on any particular emerging transport trends or their status as knowledge-based risk societies, but rather, as sites *interacting with* the (by then evident) knowledge-based conflicts *about* physical mobility in London. That is, it became evident that, via the medium of blogging, participants in London *interact with* and *mobilise* information about other places, and that became a theme I wanted to learn more about. In other

words, I chose to follow some networks and flows⁹. As it turned out, the interaction can work both ways; some participants in the secondary sites interact with blogs from London (and elsewhere), and in that sense, such interview data could be considered a form of triangulation. In contrast to participants in London, New York and Paris who, in the subsequent empirical chapters (Chapters 5-8), are identified as such (as well as by their stakeholder type), for reasons of anonymity, participants in the secondary field sites are identified simply as 'European'. Ultimately however, whilst some¹⁰ of this data factors into the empirical chapters, the primary focus is London, New York and Paris (see also section 9.2).

On Comparative and Qualitative Research, Research Questions

Before moving on to discuss method and analysis, a final point needs to be made about what the design of this research is not: comparative. There is only one unit of analysis: blogging. That is, although the very inclusion of more than one field site 'automatically' reveals similarities and differences, and although all social research entails at least some degree of identifying and explaining patterns and irregularities and thus could be considered comparative 'by definition' (May, 2011: 243), comparison for the purpose of explaining and generalising from similarities and differences across field sites is not the intention of this study. This is primarily because the *phenomenon of blogging* about cycling-related transport policy in each of three places is the focus - not comparison. That is, more particularisation than comparison and generalisation, the purpose here is to examine blogging in each city as having unique, intrinsic merit *in its own right*. The idea is that 'the potential for learning [about blogging in each of the three cities] is a superior criterion to representativeness in terms of generating understanding' (May, 2011: 229 on Stake, 2008; see also sections 3.2 and 9.2). Secondly, there is the matter of differences across field sites outnumbering the sites themselves, making it 'difficult to [...] determine relationships' (Neuman, 2006: 438).

Thirdly, this research is not comparative because of concerns the very concept raises. That is, to approach these field sites as bound locations or 'homogeneous units' (Beck and Sznaider, 2006: 6) and comparable as such would contradict much of the literature cited in section 2.1 suggesting the increased significance of *mobility* to social relations (Urry, 2000); the increased convergence across, and divergence within, social contexts (particularly cities, Beck and Sznaider, 2006). For one thing, comparative methodology has not 'developed at the same speed' (May, 2011: 245) as the information and communication technologies that mobilise ever-more aspects of our ever-

⁹ Which perhaps suggests that all methods can be 'mobile' however 'static' they otherwise seem to be. See next section for more detailed discussion on 'mobile methods'.

¹⁰ As Wellington and Szcerbinski (2007: 101) state, the processing of collecting, breaking-down and reassembling data sometimes entails 'leaving lots of bits lying around unused at the end'.

mobile lives. More broadly however, the fluid networks, scapes and flows said to characterise late modernity simply do not - as such - lend to empirical investigations and generalisations based on pinning one 'society' against another.

They do however demand to be understood in terms of the social relations of which they are constituted; the social relations that, as ever, take place *somewhere* and not exclusively in some 'abstract space of flows' (Beck, 2008a: 34). Indeed, this is precisely what is lacking Beck (2008a: 33) suggests when asking: 'Does thinking in 'flows' and 'networks' neglect the *agency* of the actors and their sense-making activities as forces in shaping the flows themselves?' As such, he calls for the traditionally common but increasingly inappropriate *methodological nationalism* to be replaced by *methodological cosmopolitanism* - 'one of the key concepts [...] of the reflexive second modernity' (Beck and Sznaider, 2006: 10). To do so, he argues, is to shift the focus from the 'comparative analyses of societies' (Beck and Sznaider, 2006: 5) to the examination of actors as 'powerful players', whose 'place-making projects' or 'active relationships' to place actually 'cut across place', hence 'redefining' it (Beck, 2008a: 34) and rendering it incomparable as such.

In terms of mobilities, this means developing an understanding of the 'active mobility politics of actors on every scale from the body to the global'; the 'sophisticated strategies' people develop for 'coping with mobility constraints' (Beck, 2008a: 33; see above discussion on 'issues'). Blogging about cycling-related transport policy - as possibly one such strategy, form of mobility politics, 'place-making project' and/or mediator of residents' relationship to each London, New York and Paris - is, in each of the four empirical chapters that follow, questioned and discussed in terms of its underlying intentions and actual effects:

- Why do individuals blog about cycling-related transport policy in the first place?
- How do they exploit the medium's affordances to try to make a difference?
- Does blogging make a difference to expert systems? If so, how?
- If not, why?

Of concern here are questions of 'how' and 'why'; processes (e.g. those that precipitate and stem from blogging, the act of blogging itself) rather than 'results' (e.g. blog content or statistics); how physical movement becomes meaningful and politicised through information movement (rather than through physical movement itself - the subject of already much literature, see Chapter 2); a previously unstudied social phenomenon and the perspectives of those involved in it (Bryman, 2012; Gillham, 2000). As such, these questions are best addressed using a qualitative approach that entails examination of interactive processes (as opposed to counting or measuring variables,

'facts' or a so-called 'objective reality') and the interpretation of their meaning (as opposed to letting such 'facts' speak for themselves, void of nuanced social, cultural and political meanings) (Bryman, 2012; Neuman, 2006). This project's interest in blogging is *not*, in other words, about the number of visits¹¹ to such blogs (which would say nothing of visitor type, such as whether they are representatives of expert systems, why they are visiting, or, who is *not* visiting and why, and all to what effect); nor is it about the quantified distribution of hyperlinks or other content at any given moment (which would say little about the other less traceable ways blogging may be making a difference).

One may therefore regard this project as positioned amongst the work of the 'majority of mobility researchers' (Merriman, 2013:4) who use qualitative methods; those who Manderscheid (2013: 2 and 24) argues seem to have 'reached consensus' about the 'micro-sociological level' of mobilities¹² being 'best analysed using qualitative approaches. As such, it may also be said that I am inviting the common criticisms of such approaches as too theoretical or 'too cultural' (Shaw and Hesse, 2010: 307), or indeed disconnected from the traditions of 'the quantitative field of transport research' (Manderscheid, 2013: 27). For its part, however, transport research - born in part, Goetz and colleagues (2009: 331) argue, out of a (characteristically early modern) 'belief in the power' and progress of new methods 'to make society better' - has been accused of being insular, 'moribund' (Hansen, 2003: 469), not progressive, or too traditional, and not cultural or theoretical *enough*. However accurate, or unfounded and stereotypical any of these claims may be, one result is 'tensions between the two communities' and their development of 'almost completely separate approaches to [movement as] a common subject'¹³ (Shaw and Hesse, 2010: 310).

3.2 Mobile Methods, Interviews

Mobile Methods

Another result of the perceived methodological dichotomy between the two disciplines of transport and mobilities research - from the perspective of some mobilities researchers - is the need for 'methodological innovation and diversification' (Merriman, 2013: 2) in the form of *mobile methods* (Bærenholdt et al, 2004; Büscher et al, 2011; Fincham et al, 2010; Sheller and Urry, 2006). These

^{11 &#}x27;Maximization of audience shares' is no longer the ultimate goal or indication of influence as was was during media's industrial age (Bruns and Jacobs, 2006: 6; Bruns, 2007).

¹² Studies concerned with the 'micro-sociological level' of mobilities tend not however to link together the 'active experience of mobility' with more *macro* structural conditions (Manderscheid, 2013: 2 and 3); see Chapter 2 on the failure to understand contemporary cycling in terms of wider technological developments and 'collective constructions of social meaning' (Manderscheid 2013: 24) such as *risk*.

¹³ By suggesting that transport and mobilities studies share a 'common subject' Shaw and Hesse (2010: 310) illustrate the tendency for mobilities to narrowly be conceptualised as physical movement (see section 2.1).

are, according to Merriman (2013: 1 and 4), 'frequently justified' based on the assumption that older - 'often quantitative' - approaches cannot adequately capture or appreciate some of the more nuanced aspects of movement. Indeed Fincham and colleagues (2010: viii) describe their edited collection on mobile methodologies as 'emphasis[ing] the use of qualitative data [...] in contrast to the discourses of scientific objectivity, quantification, and rational choice' commonly found within transport geography. Underlying notions of mobile methods is the suggestion that researchers 'use movement as part of the research approach itself' (Hein et al, 2008: 1269) and participate in, directly experience or immerse themselves in the mobility of their objects of study in order to 'keep as much of the context of practice as possible' (Spinney 2009: 827). As such, researchers may, for example, 'ride along' (Spinney, 2007; 2008), 'walk along' (Kusenbach, 2003) or 'drive along' (Laurier, 2004) with their research participants, or move with them virtually through the analysis of websites, emails, social media and other ICT-mediated content (Fay, 2007; Molz, 2006). 'To move, be and see with' as such is, according to Merriman (2013: 8) often posited as a newfound methodological 'imperative'; a necessary and 'inevitable complement' to the new mobilities paradigm (e.g. Fincham et al, 2010; Hein et al, 2008; see section 2.1).

Whilst some mobile methods are recognised for 'reinvigorating the field' (Merriman, 2013: 3) (including notably the use of video to better understand cycling, see Spinney, 2009; 2011; Brown and Spinney, 2010), mobile methodology has more broadly been criticised for its claims of newness and superiority (Shaw and Hesse, 2010). That is, along with more general calls for mobilities researchers to develop a 'strong sense of historical consciousness' and 'to remember' all the work on mobilities that predates recognition of the new paradigm (Cresswell, 2011: 555, see section 2.1), are those who caution against 'overstating the newness' (Merriman, 2013: 4) of mobile methodologies and who encourage recognition of the ways in which movement in one form or another is - and has been - approached by diverse disciplines (before such work 'amassed into a more-or-less coherent interdisciplinary field in the past decade', Merriman, 2013: 6; although see section 2.1 on the divisions that still remain between research of symbolic and material movement).

Herein lies what I consider to be the most obvious shortcoming of existing conceptualisations of mobile methodologies: their bias towards physical movement and corresponding frequent and narrow positioning in opposition to transport studies, without due consideration of other disciplines' study of movement in its not-necessarily embodied or even physical forms. Indeed one need only to imagine just how different the arguments in favour of mobile methodologies would be if they were as commonly pinned against other disciplines' methodological traditions (e.g. communication studies and the (virtual) movement of imagery, ideas or other information) as they are with transport. As Bissell (2010: 53) argues, mobile methods 'often privilege particularly active

dimensions of the mobile body [...] potentially eclips[ing] a range of phenomena which might be equally integral to the experience of movement'. Tellingly however, the neglected phenomena Bissel has in mind, although more 'passive' or 'quiescent' (e.g. 'weariness, tiredness, lethargy, hunger and pain', Bissel, 2010: 58) than the 'active' physical mobility from which they may result, are likewise corporeal or embodied, and further evidence of the tendency to approach the study of movement as it is experienced physically (by humans). Similarly, Merriman (2013: 3 and 12) comments that 'there is no doubt that mobile methods have mainly been deployed to understand the experiences and movements of embodied, mobile human subjects', including by 'drawing upon video, ethnographic and participative methods, 'go-alongs', and a host of other techniques in an attempt to apprehend and understand the mobile practices of cyclists, walkers, ferry passengers, drivers and other mobile subjects'. This tendency, he argues, both perpetuates and results from the binary between mobilities and moorings, or movement and stasis, with mobile methods emphasising only 'one side of this binary' (Merriman, 2013: 11) at the expense of examining the relatively more static 'transport spaces, infrastructures, and policies', such as 'cycle paths, scenic roads, motorways, railway lines and airline cabins' (Merriman, 2013: 11). Thus even Merriman's plea for a so-called more 'symmetrical' or balanced approach to mobile methodology is skewed towards the physical aspects of human movement. Likewise, Fincham and colleagues (2010: viii) advocate a mobile approach to methodology based on its ability to 'open[] up mobilities research to [...] studies of walking, driving, bicycling, passengering and using public transport [...] but also [...] the kinaesthetic and sensory aspects of musicscapes, dance or martial arts, transnational travel, and auto-biographies of movement'. Rather than necessarily 'open up' the research however, such dominant conceptualisations and applications of mobile methodologies risk inadvertently confining it by limiting the scope of mobility to the study of 'the body-in-action' (Bissel, 2010: 56).

That physical movement is more often than not the concern of methods labelled 'mobile' is perhaps unsurprising given the disproportionate emphasis placed on it within mobilities research more broadly (see section 2.1). At the same time, this is all somewhat perplexing given the promise of mobilities being 'about so much else besides' (Cresswell, 2011: 554) and claims that movement in a narrow, 'material, transportation sense is being dismantled' by the 'dawn of the virtual age' (Fincham et al, 2010: 3). It is also surprising given the methodological agenda set out in the new mobilities paradigm (Sheller and Urry, 2006), as well as in subsequent work by Urry and colleagues (e.g. Büscher and Urry, 2009; Büscher et al, 2011; see also Law and Urry, 2003), all of which is at pains to stress the importance of mobile methods for examining different (yet interconnected) types of mobilities, including and especially as they relate to information and communication technologies (not just people and objects). When such technologies are considered in the context of mobile methodologies however, it seems often to be either as a token after-thought (following the foregrounding of investigations into the embodied movements of

human subjects) or as 'solutions¹⁴ to methodological questions' (about the study of human physical movement, see for example Jones and Burwood's (2001) use of global positioning systems to study cycling; Hein et al's (2008) use of geographical information systems to study walking; Spinney's (2011) use of digital video to study cycling), *rather than such technologies as mobile objects of research in their own right*, with their own methodological dilemmas in need of solutions and strategies.

As a consequence, there is relatively little critical reflection on what 'methods for mobility research' (Sheller and Urry, 2006: 217) - as opposed to 'mobile methods' (on the conflation of the two see Merriman, 2013: 2) - should actually mean in ICT contexts (which are more or less all contexts). Instead, those interested in researching internet-mediated mobility are thus encouraged to do so 'on the move' by participating in the activities or phenomena under investigation in 'virtual space' (and hence implicitly, not necessarily physically moving) (Büscher and Urry, 2009). Underlying such suggestions is a triple assumption that: 1) in the context of the internet, mobile methodology equates to some sort of participant observation, or virtual or cyber ethnography 2) such methodology is the most effective way of approaching internet-mobilised phenomena (regardless of what is actually being asked of it) (e.g. Is it a question of information production or delivery? Its reception or consumption? The effects of internet-mediated communication on particular networks, scapes and flows? The infrastructures of virtual movement?) 3) virtual spaces of movement are distinct from physical ones and/or are essential methodological field sites (see the 'conversation' amongst Orgad, Bakardjieva and Gajjala (in Markham and Baym, 2008) about online and offline data used to study internet phenomena). What these assumptions illustrate is that the burgeoning body of social science research of the internet (including its own emerging methodological preferences)¹⁵ has not yet been as critically dissected as transport studies by advocates of mobile methods.

One of the reasons for raising the topic of mobile methodologies, in addition to its significance within the discipline, is to position the methodology of this project in relation to social science research of the internet whilst at the same time distancing it from those studies whose foremost concern is physical movement, and/or whose 'push to promote innovative 'mobile methods' is in danger of encouraging researchers to abandon methods labelled 'conventional' – such as interviews' (Merriman, 2013: 2). Like Merriman, my problem with mobile methodology is the

¹⁴ The relative affordability, availability and ease of using various hardware and software makes visualising or otherwise capturing, storing, transmitting and analysing (possibly very large quantities of) data more feasible.

¹⁵ That said, there are 'no central methodological or theoretical guidelines' characterising studies of the internet, with findings 'widely distributed and decentralized', and 'cut[ting] across all academic disciplines' (Markham, 2011: 111) - perhaps a reflection of the relatively uncertain, mobile and fluid late modern world such studies were born into (and in contrast to the seemingly linear and highly-rationalised one of early transport geography, according to Goetz and colleagues (2009: 325).

suggestion that it is imperative - a suggestion that relies on the assumption that methods deemed immobile (or perhaps not-mobile-enough) are less capable of shedding light on mobility because they 'slow down and freeze experiences' (Fincham et al, 2010: 2). Correspondingly, nor do I accept the suggestion that to eschew mobile methodology is to risk being 'left behind in the slow lane of research' (Büscher et al., 2011: 14) any more than I would accept claims that cycling itself is outmoded, irrelevant, inefficient, slows down and freezes experiences or that, by cycling, one is less capable of assigning meaning to other modes of physical movement because they may be faster, 16 cover different ground or deploy more recent technologies. Indeed, precisely on the contrary, one could argue that relative immobility or being 'on the outside' of a particular form of movement (Aldred, 2010) prompts critical reflection of it. Could it be that, much in the same way that travel is said to shed light on dwelling, that mobility is thought to prompt critical reflection of one's 'habitual' self ('only by sometimes leaving the place we dwell in are we capable to reflect critically on our existence', Beckmann, 2001b: 111), relative immobility prompts critical reflection of movement (Adey, 2006)?¹⁷ That acquiring insight is as much or more a matter of contrast or a change in one's mobility status (i.e. the associated sense of newness or friction being what prompts reflection) than mobility per se?

In any case, it would seem that the relative (im)mobility of one's research methods is secondary in importance to *what is being asked* of mobile phenomena; that the place of mobile methods should first and foremost be a matter of *what questions are at stake*, rather than mobile methods for mobility's sake. Thus rather than put the cart before the horse and assume this project's methods must reflect, or be as mobile as, its object of research (i.e. blogging), I adhere to the otherwise 'familiar incantation' communications scholar Bakarjieva (2008: 59) reiterates to those embarking on qualitative internet research:

Define your research object and formulate your question first. Decide what the data necessary for studying your research object may look like and where you can find them. Doing so will likely involve consideration of what sides of your object are made up of online texts and interactions and what you could learn about it through offline or online interviews and observations. What will be your entry point/s? Then proceed as with any other study - specify your methods and how to go about applying them.

¹⁶ See Bissell (2010) and Merriman (2013: 11) on the tendency for research to privilege active, speedy and exhilarating movements at the expense of more passive, slow or mundane ones, as well as at the expense of stillness between physical movements - all of which deserve more attention.

¹⁷ See Mitchell (2014) on how the prospect of attempting to physically move and contending with transport systems unable to cope with demand (i.e. imposed immobility) makes the decision to 'stay at home' more appealing.

Finally, whilst the primary purpose of this discussion on mobile methods has been to defend my rationale for not using them, it is also about setting-up the subsequent discussion defending my rationale for using an arguably 'less mobile' alternative 18, which as such, became something of a challenge for me throughout the PhD. That is, I developed a nagging doubt: was my choice of interviewing (virtually) mobile enough? This was not based on concerns I (or others familiar with this project¹⁹) had regarding the ability of interviews to address my research questions. Rather, having familiarised myself with the literature on mobile methodologies and social science research of the internet - as well as by virtue of the age - it was more a matter of me sensing an 'imperative' to be methodologically mobile (Kesselring, 2008; Merriman, 2013), to be 'connected' and digitally follow, capture and trace one aspect or another of policy blogging because a) I could (i.e. 'mobile methodology' as a byproduct of advancements in information technology; see also Latour, 2012) b) because I should, as a researcher at this point in time/history²⁰ and as someone researching an internet-mediated phenomenon. One consequence of this doubt was that I spent not insignificant amounts of time investigating ways in which I might supplement interviews with online data, including by testing various hyperlink and other content analysis and mapping tools (see also section 9.2). Whilst these forays did result in some pretty pictures (see Appendix B), the analysis of which would obviously have contributed something to this project, they did not, I believe, add substantial value or analytical power²¹. So, whilst this perceived 'pressure' to be more methodologically mobile at times meant that I veered off course and was less confident than I otherwise may have been, it could also be regarded as 'healthy' - not all was lost - in the sense that my nagging doubt forced me to continually re-evaluate my decisions. The preceding 'carefully edited retrospective' (Baym and Markham, 2009: ix) on mobile methodologies, as well as the subsequent one on semi-structured interviews are effectively the results of the confidence I gradually acquired during these 'messy' processes (Law, 2004; see also this Chapter's conclusions).

Semi-Structured Interviews

Qualitative interviews are valued for reaching where 'other methods cannot reach' (Wellington and Szczerbinski (2007: 81) and hence for eliciting comparatively rich data (Gillham, 2000). This is

¹⁸ I travelled to and within five field sites on two continents (as detailed in section 3.3) in order to conduct interviews. See also section 3.1 on interviewing as 'mobile' versus 'static'.

¹⁹ Indeed on the contrary, following my suggestion that I might supplement the interviews with some sort of online data and virtually mobile method, I was advised during my second year review that I had 'enough data' and should be analysing it and writing up.

²⁰ See for example 'Tweets from the Digital Academic workshop' (2015; Monaghan, 2015), as well as Kozinets' (2009) comment on the importance of 'nethnography' in section 9.2.

²¹ As something of a compromise, many participant comments cited in Chapters 5-8 are supplemented, and arguably triangulated, with online data in the form of footnoted references to particular blog posts and institutional media sources, many of which illustrate participants' comments and hence support their validity.

despite the fact that interviews, on their own, in a traditional (i.e. sedentary, face-to-face)²² sense and in contrast to participant observation (together the 'most prominent methods' of qualitative data collection, Bryman, 2012: 493), do not entail researchers participating or immersing themselves in the particular activity or environment under investigation. As such, some may argue that such interviews are not a 'mobile method';23 create a 'false social situation' that 'cannot be assumed to produce data which reflect a real world beyond interpretation' (May, 2011: 157); do not allow researchers 'to see as others see' (Bryman, 2012: 494); and over-rely on participants' (verbal) accounts of their own behaviour, making it potentially difficult for researchers to control or steer²⁴ the interaction, and/or lead to accounts which, however much a 'genuine reflection of a person's experiences', are incomplete or inaccurate for one reason or another²⁵ (May, 2011: 158; Gillham, 2000; Orgad, 2005; see section 8.1). Interviews may, in other words, be criticised on the basis that 'the link between a person's account of an action and the action itself cannot be made' (May, 2011: 157). Applying this logic to the subject of this study, any links between interviews about blogging (i.e. participants' accounts of blogging) and blogging itself (as the 'action' in question) would not be considered reliable. Similarly, links between transport (as 'action') and communication about transport (e.g. via blogging) could not reliably be made. The validity of blogging - and essentially any form of communication, including interviews - would in this view also be criticised as mere 'interpretation'. Moreover, interviewing of course also relies heavily on the interviewer's (i.e. not just the interviewee's) interpretations (see also section 3.3 on 'positionality'). That stepping 'outside' of an action to communicate about it – whether during an interview or via a blog - somehow creates a 'false social situation' (May, 2011: 157) – is however not an argument I subscribe to. Information gleaned from interviews is not simply 'inaccurate' or 'accurate', but rather - and key for the purposes of this project - 'a means of analysing the ways in

²² And in contrast to interviews 'on the move' or 'participation-while-interviewing' (Büscher and Urry, 2009: 105).

²³ Whilst a 'mobile method' is (arguably) in principle one that is attentive to mobility in whatever data has been collected, the effectiveness of 'standard' (Law and Urry, 2003: 10) or 'existing methods of research in and around the social sciences' (Büscher et al, 2011: 1) to actually collect such data has been questioned by those who advocate the mobility of the data collection process itself. Presumably this includes interviews, which, however dedicated they may be to mobile subjects and however richly they may capture the social relations underpinning them, traditionally involve interviewer and interviewee sitting face-to-face.

²⁴ For example, I found that some participants (like many researchers, see section 2.1) found it more sensible, interesting or just 'natural' (i.e. a reflex) to discuss *transport* than to discuss *communication about* transport - discussions that I then sought to re-direct or steer back towards blogging (see also section 3.3 on my experience of interviewing in Paris).

²⁵ For example, interviews with those whose comments may be taken to represent the views of their employer or another organisation or system may 'elicit official responses reflecting how the organization ought to appear in terms of the rhetoric of its own image' rather that 'how things actually are' (May, 2011: 143). As such, and in the case of this project, participants representing government, media and cycling's civil society (see next section) may be inclined to strike a balance between stating that they do pay attention to policy blogs even if they do not (in order to appear democratic and legitimate) and stating that they do not pay attention to policy blogs even if they do (in order to undermine blogging's or certain blogs' legitimacy).

which people consider events and relationships and the reasons they offer for doing so' (May, 2011: 159).

A limited number of interviews may, moreover, be criticised for not painting a reliably representative or generalisable picture, as there will always be another version of 'the story' to be told. Acquiring 'representative' or 'generalisable' data is not, however, the only 'legitimate' or indeed 'desirable' (Flyvbjerg, 2006: 227 and 237) method of learning, and to claim otherwise would be to disregard 'the many ways by which people gain and acquire knowledge' (Flyvbjerg, 2006: 227; recall also section 3.1's discussion on comparative research). Indeed 'formal generalisation' is, according to Flyvbjerg (2006: 226) 'considerably overrated as the main source of scientific progress'; just because data 'cannot be formally generalized does not mean that it cannot enter into the collective process of knowledge accumulation in a given field or in a society'. It is along such lines that my purpose in interviewing was to obtain points of view about policy blogging (which other researchers might or might not use to supplement their own attempts at generalisation) and not for those points of view to be 'all things to all people'.

Despite these criticisms and potential shortcomings, when it comes to seeking to qualitatively understand internet phenomena, there are distinct advantages to interviewing. Most broadly, this is because so-called 'internet phenomena' are not confined to internet/virtual/online settings, just as many at-face-value 'offline' phenomena (such as cycling) have virtual components. In other words, so-called 'online' and 'offline' data are in fact 'complementary records of events unfolding within the same social world and not as specimens from two different planets' (Bakarjieva, 2008: 60; see Castells, 2010 on the 'culture of real virtuality'). Indeed to think of them as separate social spaces, some argue, is a mark of early, more technologically-deterministic internet studies (Fuchs, 2008; Hine, 2008; Wellman, 2004). As Gajjala (2008: 61) states, 'When we actually scrutinize what it means to be online and to be offline, we see that they are not separable states of being [...] for when we are online we are simultaneously somewhere else physically as well - but we are definitely not disembodied [...] Neither are we not online or not connected when we are offline. since we are simultaneously connected physically, hands typing, eyes reading [...] and engaged with activities in the wider physical space surrounding us [...] We cannot really separate our being online from being offline, because online and offline are not discrete entities'. In other words, 'all 'Internet research' takes place in an embedded social context' and thus to 'understand Internetbased phenomena, you need to understand that broader context. Consequently, most 'online research' really also should have an offline component' (Bruckman, 2002).

Face-to-face interviews, for example - the method considered most effective for the purposes of this project - enable investigation into social contexts that *cannot be observed* online (Wellington

and Szczerbinski, 2007: 81). That is, despite conditions (the digitisation of human networks) that at first glance may seem to suggest otherwise (see Latour, 2012), not all social contexts, relations or meanings are observable or traceable online: 'There are substantial interpretative processes, practices and things in which users are engaged online that do not occur on an observable level, and yet entail significant meanings for users' (Orgad, 2005: 58). Blogs and other internet media exist by virtue of those who contribute content - who 'actively participate [...] and therefore are visible' (Orgad, 2008: 43). As such, connections or impressions that emerge as people interact via these media, but which are not represented by online content in one form or another (e.g. discourse, hyperlinks)²⁶ are overlooked by methods that capture only such content: 'online research can obscure contexts of interaction - internet texts are not the whole story' (Crow and Powell, 2010). 'Many online participants are only lurkers' (Orgad, 2008: 43), whose 'unwritten' rules or practices - such as the act of not commenting on blogs, not linking to them or otherwise not posting content - are 'highly consequential for understanding an internet-related context' (Orgad, 2008: 43) although remain undetected when researchers only 'move with' phenomena they can readily see, observe or trace: 'The fact that I do not link to you remains invisible. The unanswered e-mail is the most significant one' (Lovink, 2007: 253).

Also invisible to the 'mobile' observer of blog (or other internet media) content are precisely the kinds of data important to the questions (see previous section) this project is asking: a) the circumstances *leading up to* the production of content b) *awareness and interpretations* of content, or how blogging, as a phenomenon, is perceived (as opposed to how, for example, cycling-related transport policy - the subject of blog content - is perceived) c) just who is and is not paying attention and why (e.g. are representatives of expert systems responsible for cycling-related transport policy?) d) what private and/or offline connections (e.g. by email or face-to-face) are taking place due to blogging e) what do individuals choose *not* to communicate online (e.g. what is unsayable, 'unbloggable'?). What is largely at stake here, in other words, are *accounts* of actions rather than *traces* of them; not *what* is being communicated online, but rather, perceptions of that communication. Confining data collection to that which is readily observable online would, in short, risk neglecting entire social contexts that 'can be invisible or only partially retrievable from digital exchanges themselves' (Androutsopoulos, 2013: 237).

Semi-structured, one-to-one interviews, not only help to overcome the above shortcomings, they also have distinct advantages over other approaches to interviewing. In contrast to structured interviews and questionnaires, for example, which aim to maximise comparability by standardising questions and possible answers that tend to reflect the concerns of the researcher over and above

²⁶ See Bruns et al (2011) on some of the practical problems associated with collecting and analysing hyperlink and/or discursive data from blogs.

the interviewee, semi-structured interviews are more responsive to the directions in which participants take their interviews, and thus allow for the qualitative depth I was seeking without getting bogged down with, for the purposes of this project, irrelevant concerns of measurable comparability (Bryman, 2012; May, 2011). Moreover, any benefits that may have been realised through the collective interviewing of focus groups would, it was presumed, have been offset by their lack of anonymity (more on which in the next section) - important given the frequently politically-charged nature of urban cycling and that some participants' would be representing organisations they rely on for their livelihood.

3.3 Recruitment, Technique, Coding and Analysis, Positionality

Recruitment

The process of recruiting interviewees began by shortlisting individuals who I considered to be 'key' (Gillham, 2000), based either on their blog or stakeholder status as someone with a professional or institutional interest²⁷ in cycling-related transport policy. This initial shortlisting was informed by a combination of colleagues' recommendations, basic internet searching and my preexisting awareness of some blogs, institutions and individuals. I approached all potential participants by email, invited them to an interview and with a few exceptions (approximately 5-10 across all field sites), they were receptive. Gaining access to participants is not however as straightforward as 'opening a door': 'luck and personal ties' indeed often played a part (Neuman, 2006: 389). As such, field work in each London, New York and Paris took place in three month-long 'waves' (all between September 2011 and May 2012),28 with the flexibility afforded by time designed to minimise some of the risks associated with interviewing (i.e. recruitment, (re)scheduling, cancellations²⁹) and to maximise opportunities for ongoing recruitment. For example, one of my initial contacts in Paris invited me to an event where I recruited another participant who, following our interview, invited me to attend an otherwise private meeting, discussions at which informed my line of questioning and ongoing recruitment in the city. My time in New York meanwhile coincided with several events³⁰ at which I directly and indirectly recruited participants. In addition to serving as vehicles for recruitment, these field work experiences

²⁷ My categorisation of 'professional or institutional stakeholders' ultimately evolved into 'expert system representatives' as discussed later in this section.

²⁸ Interviews in the secondary field sites took place during two, two week periods in October 2011 and September 2012.

²⁹ See, for example, the discussion later in this section on my experience of interviewing in Paris. Indeed another potential limitation or weakness of interviewing is its resource intensiveness. Approximately four months were allocated to conduct this project's interviews. Although this may be regarded as time-consuming and therefore a weakness, never did I sense that the interviews were *too* time-consuming or not worth the time. Transcribing the interviews - each of which averaged between 10-15,000 words and took me approximately one day to complete - was however more tedious. Moreover, in terms of expense, or the financial limitations of interviewing face-to-face, my ESRC studentship was fortunately supplemented by a fieldwork allowance.

contributed to the interpretations I was developing at each site. As such, they may be regarded as a form of triangulation (although I did not formally use or document them as 'data'), much like the 'outsider' perspectives on London, New York and Paris obtained in the secondary field sites (see section 3.1); the different stakeholder types represented within each site (i.e. institutional, different types of institutions, bloggers); and the footnoted references to blog posts and other online sources in the subsequent empirical Chapters 5-8 (see section 3.2).

With each interview, moreover, new leads emerged as I sought recommendations from participants about who else I should meet. The main advantage of doing so - gaining access - was deemed to outweigh the potential disadvantage of 'inheriting' interviewees' networks or being overlyinfluenced by their perspectives on who would be suitable for this project (at the risk of neglecting relevant others) (May, 2011: 145). Snowballing occurred both locally and at a distance, with, for example, a participant in Paris emailing several colleagues in New York on my behalf. Although this was all about opening doors, it was less about others gatekeeping or barring access as such, and more about me acquiring practical knowledge (e.g. of email addresses, organisational structures and 'who does what'), as well as being flexible enough to seize opportunities and follow unexpected leads. It was moreover about recognising otherwise obscure networks. That is, insofar as these connections amongst participants and potential participants represent key links, nodes or mechanisms through which information about transport is made mobile (together creating networks), the relatively abstract concepts of, for example, 'policy actors', 'policy mobilities' and 'policy networks' (see section 6.3) became more apparent to me; I was able to identify and mentally map some of those through whom cycling-related policy information flows. That is, through the process of actually conducting the research and recruiting participants (and not just through the insights participants shared with me), a core concern of this thesis - the mobility of information about physical mobility - became at least partially 'visible' as I encountered networked human actors face-to-face.

Recruiting and interviewing continued until, within the practical limitations of this project (namely, time) I reached a point of saturation whereby a range of potential stakeholder positions had been accounted for, and key themes (e.g disillusionment, cooperation and interaction) began to repeat themselves, with new ones not emerging or at least not being wildly divergent from already-established ones³¹: ultimately 46 interviews, 17 of which in London, 11 in Paris, 11 in New York and seven in the secondary field sites, with 17 bloggers and 29 professional and/or institutional

³⁰ These included transportation community board meetings (see section 4.1), a series of public walks in memory of Jane Jacobs (Jane Jacobs Walks, 2012), a Streetsblog-organised happy hour (OpenPlans, 2012) and a bike-share exhibition at Grand Central Public Library organised by the Department of Transportation (NYCDOT, n.d./3).

³¹ Recall however the point made in section 3.2 that these interviews were never intended to be 'generalisable' or 'representative'.

stakeholders, the latter of which were ultimately identified as representing one of three 'expert systems': 1) the urban state (city officials) 2) instituted media (journalists) 3) cycling's civil society (campaigners)(more on which below). Not all participants neatly fit into one category however, and Figure 1 illustrates my attempt to classify them into 'primary' and 'secondary' stakeholder categories based on whichever was more or less pronounced during the interview.

		Pseudonym	Primary Stakeholder	Secondary Stakeholder
			Category	Category
London	1	Daniel	Blogger	Campaigner
	2	Nigel	Transport Consultant	Campaigner
	3	Andrew	Blogger	
	4	Mark	Campaigner	
	5	Annabelle	City Official	
	6	George	City Official	
	7	Samantha	City Official	
	8	Chris	Blogger	Campaigner
	9	Rosemary	Campaigner	
	10	Robert	City Official	
	11	James	Blogger	
	12	Rory	Campaigner	
	13	Matthew	Blogger	Campaigner
	14	Iris	Campaigner	
	15	John	Blogger	Campaigner
	16	Paul	Journalist	Blogger
	17	Elisabeth	City Official	
New York	18	Claire	Campaigner	
	19	Darren	Blogger	Journalist, Campaigner
	20	Mike	Blogger	Campaigner
	21	Nathan	City Official	
	22	Renee	Journalist	Campaigner
	23	Sara	Blogger	Campaigner
	24	Charles	Blogger	Journalist
	25	Brad	Blogger	Journalist
	26	Nick	Blogger	Journalist
	27	Martin	Blogger	Campaigner
	28	Adam	Blogger	Journalist
Paris	29	Bruno	Blogger	
	30	André	City Official	
	31	Luc	Campaigner	

32	Peter	Campaigner	
33	Denis	City Official	
34	Edouard	Transport Consultant	Blogger
35	Pascal	Campaigner	
36	David	Campaigner	
37	Gérard	City Official	Blogger
38	Inès	Blogger	Transport Consultant
39	Patrice	Campaigner	
Secondary Field Sites 40	Morten	Blogger	
41	Alexander	City Official	
42	Thomas	Transport Consultant	
43	Jacob	Campaigner	
44	Leo	Campaigner	
45	Timothy	Campaigner	
46	Mathias	Campaigner	
Participants by Primary	Bloggers	17 (+3)	
(and Secondary)			
Stakeholder Type			
	Campaigners	14 (+10)	
	City Officials	10	
	Transport	3 (+1)	
	Consultants		
	Journalists	2 (+5)	

Figure 1: Interview participants by field site and stakeholder type

Technique

At the start of each interview, participants were asked to read a project information sheet and sign a consent form³², the former of which explained the purpose of the project and interview, as well as the subsequent handling of the data, including that 1) each participant would receive a(n amendable) copy of their transcript³³ 2) participant identities would be anonymised in the final write-up, although I would consider crediting anyone who preferred otherwise (it was thought that some participants - namely bloggers - may wish to be credited for their remarks as 'culture members or culture leaders', Kozinets, 2009: 145). Of the 46 participants, three expressed something along the lines of 'not minding' being credited (i.e. none were adamant about it),

³² Both approved by the University of East London (my then university) ethics committee for research involving human participants.

³³ Having reviewed their respective transcripts, some participants requested that I not quote certain remarks in the final write-up due to their political sensitivity and/or the possibility that their anonymity may be compromised, hence illustrating that some information was censored in this thesis.

although ultimately I used my discretion and anonymised everyone. The advantages of anonymity (e.g. protection from the potential negative consequences of candid responses) and universal anonymity (e.g. the substantiveness of comments privileged over, or not being overshadowed by, the identities of those who made them; reducing the chances that knowledge of one participant's identity may somehow compromise another's) were considered to outweigh their potential disadvantages (e.g. participants having less 'ownership' of their comments, thus possibly resulting in indifference or inaccuracy).

All interviews were guided by a set of topics and corresponding primary and secondary questions I wanted to cover, some of which differed by field site, participant type (i.e. blogger or expert system representative) and/or were tailored to each individual (see example interview schedules in Appendix C). My intention was for the interviews to be structured enough to have comparable coverage, whilst at the same time be flexible enough to stimulate discussion, to recognise the unique experiences of, and strike a chord with, each individual and to encourage the emergence of issues I had not thought to enquiry about or had underestimated the importance of.³⁴ The interviews were thus semi-structured: 'unique and personal, and yet cover[ing] essentially the same ground' (Gillham, 2000: 69). They each began with descriptive questions about the participant's background and current, particular 'stakes' in cycling, designed to overcome any 'initial apprehension' (May, 2011: 144), establish myself as a 'credible person doing a worthy project' (Wellington and Szczerbinski, 2007: 69), develop rapport and a better sense where each person was coming from before asking more evaluative questions about potentially-sensitive topics (e.g. bloggers' criticism of policy, expert systems and/or those representing them) that had the potential to compromise the interview before it had even really started (Neuman, 2006). Within each field site interview locations varied, although most took place either at the participant's workplace or a cafe. All interviews were recorded using a digital audio recorder and most lasted about an hour.

All that said, if I were to do one thing differently, it would be the Paris interviews - the preparation leading up to them or their inclusion in this project in the first place. That is, whilst I was aware prior to selecting field sites and beginning fieldwork that the number of Paris-based blogs was few by London and New York standards (see section 4.4 and Appendix A), my intentions in going there were to learn more about the ones that do exist, to discover any I had overlooked and to enquire more broadly about the policy blogosphere in Paris, or relative lack thereof. And whilst I feel satisfied that I 'achieved' those objectives, the results themselves are somewhat unsatisfying in that I did not come away with any sort of 'grand narrative' of policy blogging in Paris. That is, whilst

³⁴ Indeed it was in this way - by London participants referring to Dutch and Danish 'best practice', that blogging's role in mobilising policy knowledge became one that I deemed worth pursing (see Chapter 6).

the interviews did address transport politics, including some of the issues relating to information and communication *about* transport policy in Paris, the use of blogging or other internet media was a difficult topic to elicit substantive response (as such, comments by Paris participants feature mostly in Chapter 5). For example, when asked whether they were aware of such blogs or had considered blogging as a means of communicating about cycling-related transport policy, most participants simply replied 'no' (see Chapter 8) before veering towards speaking about the marginalisation of cycling, despite my attempts to steer relatively clear of discussions about actual, physical mobility³⁵. Moreover, some were quick to associate my references to social media or information and communication technologies with, for example, GPS (global positioning system) and smartphones (which can assist in the physical navigation of cities), rather than critical and reflexive communication *about* physical movement and/or transport policy.

How much of this was down to my skills as an interviewer, how much was lost in translation³⁶ and how much was simply a matter of participants having relatively little to say about a phenomenon that, by in large, does not exist in their world and thus does not concern them, is difficult say. That is, whilst perhaps I could have questioned and prompted participants differently or better, I am not convinced that doing so would have made that much difference. On top of all this, one of the bloggers who I had shortlisted and who had agreed by email prior to my arrival in Paris to participate in an interview, later backed-out and did not reply to my attempts at scheduling, whilst another blogger's comments were frequently drowned-out on the digital recording (by a particularly loud espresso machine in the cafe where we met) - both fairly significant blows given that each of the few policy bloggers there were 'key': I could 'not afford to lose any' (Gillham, 2000: 62). Ultimately, whilst the relative lack of interest in blogging to communicate about cycling-related transport policy in Paris is in itself 'a finding', given the opportunity to do things differently, I would either re-consider how I go about the interviews or focus exclusively on London and New York.

Analysis, Coding and Theoretical Framework

Although the 'mechanical processing' (Neuman, 2006: 460) of preparing for, conducting and transcribing the interviews had by this stage made me intimately familiar with their content, the 'truly analytic moments' (Neuman, 2006: 460) occurred when I began to code the data and recognise its less explicit patterns. Content analysis - in essence 'identifying *substantive* statements' (Gillham, 2000: 71) - entailed reading and reflecting on each transcript line-by-line and coding such statements;³⁷ organising large amounts of detailed text into more abstract or 'higher

³⁵ Indeed one of the potential weaknesses of interviewing is difficulty steering or controlling the interaction, as noted in section 3.2.

³⁶ Seven of the Paris interviews were conducted in French and four in English.

level' (Neuman, 2006: 460) but manageable themes and ultimately, a relatively 'coherent picture' (Neuman, 2006: 459).

Importantly, I did not start out coding with *a priori* theoretical notions, nor 'bring' pre-defined codes to the data. That said, nor were the codes purely 'emergent' or derived entirely from the data: clearly I had preconceived issues and questions in mind, background knowledge of the subject, life experience (see below on 'positionality') and some familiarity with the literature. So whilst it is fair to say that codes did indeed emerge from, or were 'ground in', the data, their emergence or grounding depended on my ability to recognise the themes that the codes would come to represent; to interpret, judge and make decisions by thinking 'in terms of systems and concepts' (Neuman, 2006: 461; May, 2011). Coding was, in other words, a matter of how the data spoke to but was not forced to 'fit' - ideas I had already loosely identified as important to the research (e.g. information mobility, knowledge production, system change)(Wellington and Szczerbinski, 2007: 106).

Although I identified some themes early on that informed subsequent data collection (e.g. recall section 3.1 on the mobility of policy knowledge and the addition of secondary field sites), it was only after all the data had been collected that I actually started coding³⁸ (supported by TAMS Analyzer, or Text Analysis Mark-Up System³⁹ software, Weinstein, 2006). I did so chronologically by field site (i.e. beginning with London) in order to maintain the original order, flow, rhythm and thought-process (as opposed to, for example, coding the 46 interviews at random or by participant type). My schema was thus at its most unrefined when I started coding the London interviews, but by the time I had finished them, it was already apparent that some codes had - or were about to have - too much or too little 'in them' (i.e. they were outgrowing their purpose or were unnecessary and under-used). Moreover, the overall schema needed to better reflect the conceptual relationships between or amongst codes that had too by this stage become apparent. As such, before moving on to code data from the next field site (i.e. Paris), I gave the London data a second pass, this time paying closer attention to the codes themselves than I had the first time around when the data itself had been my foremost concern. During this second stage - what Strauss (1987) defines as 'axial coding' (i.e. identifying the 'axis of key concepts', in contrast to the 'open' coding of the first stage or 'selective' coding of the third and last), I broke-down some initial

³⁷ Some codes ('tags or labels for assigning units of meaning to the descriptive or inferential information compiled during a study', Miles and Huberman, 1994: 56) overlapped, so that more than one code was at times used to represent one passage or chunk of text, whether it be a word, phrase, sentence or paragraph.

³⁸ This was largely because of the time required to transcribe, as well as to prepare for and conduct the interviews. For example, by the time I had transcribed the London and Paris interviews, preparing for the New York interviews was a higher priority than starting to code.

³⁹ Amongst its other (open source) features, TAMS supports the uploading of textual data, creation of codes and coding hierarchies and multiple search and sorting functions.

themes/codes into sub-themes/codes (e.g. from instances of 'making a difference' to the many specific types of difference made; from 'London blogs' to 'London blogs_Cyclists in the City' and other blogs by name; from comments regarding one's 'own blog' to 'own blog_purpose' and 'own blog_description; from 'policy mobility' to types of import and export), whilst consolidating others (e.g. references to 'reader comments', the 'limitations' of blogging or the 'blogosphere' in its entirety). By the time I moved on to the Paris data therefore, a foundational coding schema existed, which I felt ever-decreasingly the need to revise, although I did continue to refine it by creating new codes (e.g. 'unawareness of/not paying attention to blogs'), which entailed 'going back' to see whether the new codes applied to, and thus necessitated the re-coding of, previously-coded data.

Having proceeded as such with all the transcripts and having identified what I considered to be the core themes/codes (namely those relating to 'knowledge' and 'making a difference'), I went through them a final time, paying less attention to the now-apparent sub-core themes/codes, being mindful of particularly illustrative extracts and aiming for consistency throughout. Once comfortable with the usefulness of the schema and having recognised that the process of (re)coding had the potential to go on forever, I stopped. As Kozinets (2009: 129) cautions, the use of computer-assisted qualitative data analysis software can become counter-productive: it 'can help you create too many ideas, too many categories [...] There may be a trade-off between efficiency and creativity: just because computer software enables you to [conduct] unlimited searching or massive amounts of coding, does not mean that you should do it.'

Following this phase of 'carving up' the data, and prior to recombining, synthesising or finding it 'a new home' by locating and interpreting it in relation to existing research and social theory (i.e. positioning my brick 'in the wall'), some scholars advocate standing back from and reflecting on data that one may have become 'very close to' (Wellington and Szcerbinski, 2007: 101 and 103), otherwise risk having one's 'concentration [...] become dulled' (Gillham, 2000: 72). As it happened, it was precisely at this point that I was able to take a break (of sorts) from the project in order to participate in the ESRC's PhD internship scheme.⁴⁰ That is, I put the data and thesis to the side for three-months, whilst not neglecting them entirely in that I took advantage of this opportunity to dabble⁴¹ in the literature and read-up on work that related to the main themes that had 'emerged'

⁴⁰ See ESRC (n.d.)

⁴¹ During the internship, my daily and weekly routine was quite different than the one I had come to develop as a PhD student, in that evenings and weekends were now clearly demarcated from 'work time'. One consequence of this, and of the internship superseding the PhD as my primary focus, was that academic reading became a 'leisure activity' of sorts rather than 'work', i.e. something I did during my spare time, when not at my day job/internship. As Law (2004: 11) observes in *After Method*, we tend to read novels 'at the weekends [...] or in the ten minutes before falling asleep at night', in contrast to 'work books', which tend to get read during the day. Reversing this norm by reading 'work books' during my time off from work affected how I ingested academic material, so that although the purpose of the reading was still

via coding but which had not necessarily got caught in the net of my initial review of the literature. Indeed, as Gillham (2000: 2) argues, 'until you get in there and get hold of your data, get to understand the context, you won't know what theories (explanations) work best or make the most sense' (one reason thus not to 'rush in' (Gillham, 2000: 12) with *a priori* theoretical notions). Coding, in other words, 'moves [one] towards theory' (Neuman, 2006: 460), and having started to veer in that direction, I was eager to locate - during the internship - my theoretical hook, so that as soon as it finished, I could hit the ground running.

Ultimately, it was by re-visiting a book⁴² that had been recommended to me in the first months of the PhD that I began to recognise *risk*, as well as other tenets of the risk society and reflexive modernisation theses (e.g. reflexivity, individualisation, knowledge, subpolitics, expert⁴³ and nonlinear systems, see section 2.2) implicitly underpinning much of my data. They were, seemingly omnipresent, and yet, 'beneath the outer surface of reality' (Neuman, 2006: 466) and thus I had not coded them as such. The notion of 'risk society' - which admittedly, had not particularly spoken to me the first time around - suddenly made a great deal of sense and was theoretically interesting to me; I felt that I had hit upon something useful and could immediately see how the theory had practical application, how it could blend with or 'colour in' my data. From here, my focus narrowed therefore once again, to extracts of text that were particularly insightful in terms both of the questions at hand, as well as the risk society and reflexive modernisation theses. That is, I began to question the data and codes in terms of theory (e.g. 'Is this a case of distrust in expert knowledge? Is this an example of reflexivity?'), to link the two to 'make the story, the understanding of the text' (Richards and Richards, 1994: 448).

Positionality

Within the wider remit of critically reflecting on the process of conducting research, researchers are expected⁴⁴ to be self-aware; to auto-critique; to acknowledge their agency as 'constructor[s] of reality' instead of 'hiding behind portrayals of method as mere technique' (Hine, 2008: 5); to recognise what personal baggage of sorts (e.g. interests, values, knowledge, opinions,

always more about 'the destination, where it [would] take [me]' and less about 'the pleasure of the read itself' (Law, 2004: 11), the 'journey' was slower, less-pressurised and thus, in hindsight, I believe more exploratory than it would have been otherwise.

⁴² See Canzler et al (2008). Thanks, Rachel.

⁴³ The way I conceptualised and categorised this project's institutional participants evolved due to these readings, from their initial recruitment as 'key stakeholders' to analysis as representatives of one of three expert systems: the urban state, instituted media, cycling's civil society (see Chapter 4 and Giddens, 1991a). Whilst strictly speaking, the three transport consultant participants fall outside of these three expert systems (indeed 'consultancy' constituting one on its own), some of their comments are included in the following discussion chapters for that very reason, i.e. as relevant 'outsiders'.

⁴⁴ As Orgad (2005: 54) argues, one's experience as a researcher becomes an 'inevitable' part of the story being told.

experiences and past relationships) 'influence[s] the choices we make in starting and stopping projects and in choosing where to go in pursuing those projects' (Kendall, 2008: 23) hence impeding an investigation from being completely neutral. Put another way, there is an apparent contradiction, as May (2011: 140) observes, between the detachment demanded by any 'pursuit of objectivity' and researchers' attachments to their projects, which are also necessary, for example, to establish rapport or an 'intersubjective understanding' with participants, or to adopt (although not necessarily agree with) their perspectives. Being able to critically position oneself as a relative 'insider' or 'outsider' vis-a-vis the subject, object and/or participants of one's investigation should, Neuman (2006) argues, be one aspect of any researcher's strategy for 'entering the field'. Researchers-as-insiders, for example, may benefit from more readily accessing and/or empathising with participants, but such familiarity risks also inducing 'as much blindness as insight' (Neuman, 2006: 390) insofar as it is often difficult to recognise, and therefore challenge, 'what we are very close to' (Neuman, 2006: 390). Researchers-as-outsiders, meanwhile, whilst more likely to recognise and question assumptions when confronted with 'dramatically different [ones]' (Neuman, 2006: 390), may risk placing too much distance between researcher and 'researched'. The trick, Neuman (2006: 391) suggests, is for researchers to adopt 'both a stranger's and an insider's point of view [...], as well as the ability to switch back and forth' between the two - which is only possible if one has made an effort to critically reflect on where one stands in the first place.

Upon such reflection, there are four points I would like to make regarding my relative insideroutsider status. Firstly, as an urban dweller personally confronted by the 'crisis of daily commuting' (Smith, 2002: 435), I share a similar interest in or concern about transport as those who participated in this project. Secondly, I can relate to how some of those individuals attempt to fulfil this interest or cope with this concern cognitively, by reading and writing, and mobilising information about physical mobility. Rather than blogging however, my vehicle is this PhD thesis, reflective of the third point that I do not tend to produce online content. That is, in addition to not blogging, I do not, for example, use Twitter, Facebook or smartphone and/or app technologies. In this sense, my 'reality' is obviously different from that of many others and as such, rather than consider my 'own way of living as natural or normal' (Neuman, 2006: 390) as people tend to do, I am - by virtue of the age - constantly reminded of how abnormal I am for not producing online content (being a more passive consumer than active producer of information also means that I am especially conscious of blogging's relatively low barrier to entry, as well as the value of interviews for examining the otherwise 'invisible' opinions and practices of lurkers, such as myself, see previous section). Lastly and fourthly, I have lived in several of this project's field site cities or countries, one consequence of which being that both everywhere and nowhere become 'normal'

once one has experienced everyday life elsewhere. Moreover, unlike the previous three points, which refer to aspects of myself that would not necessarily have been obvious to participants, my status as a relative insider or outsider to their respective field site locations was in some ways revealed in my first email (interview invitation) to them, in which I introduced myself (in English or imperfect French, as a woman, from a British university). These, as well as other of my 'ascriptive characteristics' (Neuman, 2006: 386) that became apparent during the interviews themselves, may have affected participants' perceptions of me and 'hence the type of material collected' (May, 2011:140) For example, despite having lived in the UK for nearly 10 years, at times I sensed that my unwavering American accent betrayed me, both in terms of how some New Yorkers seemed to treat me as one of their own, but equally, how some Londoners seemed to assume that I was fresh off the boat. Moreover, that I can speak French - however badly - may have indicated to participants in Paris that however much an outsider, I have some insight into their culture.

All that to say, whilst the different geographic and virtual spaces central to this project - as well as some of the movements that occur within and across them - are familiar to me, they are equally 'strange'. As such, it could be said that I assumed something of a relational position to those who participated in this study - separate or detached from any one 'group' (i.e. bloggers, expert system representatives, Londoners, New Yorkers, etc.), and yet, 'in touch with all groups', or having connections to them all (Neuman, 2006: 517).

3.4 Chapter Conclusions: Methodology

The "steps taken' to solve a 'problem' constitute method' (Baym and Markham, 2008: xv), and the steps taken to solve this project's particular problems, or to answer its questions, constitute this chapter on methodology. It began by outlining the rationale for policy blogging as my unit of qualitative analysis, semi-structured interviews as my method of data collection and thematic coding as the means by which I made sense of the data. Within this framework, I reflected on some of the practical implications of carrying out the research, the place of 'mobile methods' and my own positioning as researcher.

⁴⁵ Some theorists of cosmopolitanism have observed how the notion of a 'world of nations divided into integrated societies' (Skey, 2012: 473 citing Kymlicka, 2001) is so normalised that 'many theorists don't even see the need to make it explicit'. In a similar vein, I would argue that researchers studying phenomena in field site locations that are familiar or 'normal' to them risk taking their positioning as such for granted, to the extent of not reporting on it at all. This seems to contrast to a more apparent readiness to recognise one's positioning in relation to foreign sites and/or to a specific type of culture within a given site (e.g. see Orgad, 2005 on being an 'outsider' to the breast-cancer-related online forums she studied or Spinney (2008) on simultaneously being an 'insider' to the practice of cycling and an 'outsider' to the experiences of other cyclists, including those who participated in his research).

The chapter is typical in the sense of research reports being 'carefully edited retrospectives', with research designs 'generally presented as a series of logical and chronologically ordered steps', void of their 'complex backstage story line' (Baym and Markham, 2008: ix). Put another way, 'our methodological instincts are to clean up complexity and tell straight-forward linear stories' (Hine, 2008: 5). In actuality, the process of 'doing' this research and attempting to capture, understand and explain 'elusive realities' (Law, 2004: 6) was, perhaps unsurprisingly, messier and more complicated than the one documented here '7. That to say, whilst the following discussion chapters are also a selective 'story line', they do not pretend to represent a singular truth, nor even necessarily to do justice to everything I was told during fieldwork and considered thereafter. As will be seen, they do however provide in-depth insight into how 46 individuals perceive blogging as a means of communicating about cycling-related transport policy, and as such, making a difference.

⁴⁶ As such, one may say that this chapter is not unlike A-to-B accounts of transport, which critics argue desocialise it and characterise traditional transport studies.

⁴⁷ Indeed, like other forms of mobility, one could say that my 'methodological journey' was not seamless, but entailed various 'immobilities', or challenges and barriers to progress.

Chapter 4: Context

The purpose of this chapter is to set up the empirical chapters that follow by contextualising, for each of the three field site cities, three expert systems and the phenomenon of policy blogging. My intention, in other words, is to provide the reader with a practical understanding of cycling in London, New York and Paris as it relates to the urban state (section one), instituted media (section two), cycling's civil society (section three) and policy blogging (section four). Within each of the four sections, key actors and dominant discourses are outlined.

Theoretically or more conceptually, however, the chapter may actually be understood as split into two - systems and selves, or institutions and individuals - each corresponding to a different side of the relationship between 'individuals and the complex systems of modernity' (Schlichter, 2010: 7). According to Giddens (1991a), expert systems, along with the public's trust in them, enable abstract systems, such as transport, to function. Individuals are, in other words, able to use abstract systems without having concrete knowledge about them because they trust and rely on system expertise (Schlichter, 2010). Without that trust - as Chapter 5 later demonstrates - the legitimacy of expert systems and the knowledge they impart would be questioned, whilst individuals would need to take it upon themselves to acquire knowledge about how abstract systems function, including how to manage their risks. Whilst Giddens emphasises the reliance of expert systems on the public's trust, Beck (1992: 133) emphasises the public's reliance on expert systems despite a lack of trust, arguing that as individuals have come to rely less on 'primary' socially or geographically pre-determined structures, they have little choice but to depend more on expert systems as 'secondary' ones.

One overarching contextual point worth repeating from the previous chapter and bearing in mind throughout this one is that during more or less the same period, car use or its growth declined in each of these cities, whilst bike use more or less doubled corresponding to an approximate 2% modal share (Mairie de Paris, 2011; NYCDOT, 2012; TfL, 2012b).

4.1 The State as an Expert System

Despite the shift from state to market provision of transport services in the latter quarter of the twentieth century, the public obviously relies on the state to manage transport and its risks (Docherty et al, 2004). Indeed neoliberal approaches to transport are understood by some to have ultimately resulted in the state *re-asserting* itself in such matters. As such, Docherty and colleagues (2004) identify three trends in transport governance that emerged at the turn of the

century, all of which help to set the scene for the discussion that follows and as such, are summarised here.

Firstly, the realisation that laissez-faire and 'predict and provide' approaches to private car use were 'doomed to fail (at least in terms of satiating demand in major urban areas)' (Docherty et al, 2004: 261) paves the way for state intervention in the management of transport demand and supply. Put another way, *worsening congestion* - 'the crisis of mobility' (Docherty et al, 2004: 258) - prompts a 'new realism' in transport policy, including greater interest in encouraging alternatives to the private car (Golbuff and Aldred, 2011).

Secondly, heightened awareness of the *social and environmental risks* associated with unrestricted automobility and contracted public transport services signifies a watershed in policy-making. That is, mobility deprivation (of the old, young, weak, poor and otherwise vulnerable) and environmental crisis prompt states to cast a wider transport policy net in an attempt to catch multiple policy concerns.

Thirdly, there is a shift from traditionally *centralised, hierarchical and discrete forms of transport governance* to more de-centralised, networked, overlapping and multi-layered 'alliances of stakeholders' (Docherty et al, 2004: 262). This involves both state and non-state actors (e.g. 'non-governmental organisations, charities and citizen groupings'), as well as some would argue, a more important role for cities in developing innovative policies (Marsden and Rye, 2010: 670).

With this context as its backdrop, this first section elaborates on the significance of the urban state for cycling by outlining policy targets, key policies, policy actors and policy discourses in each of this project's three cities.

Policy Targets for Cycling and Private Car Use

Each London, New York and Paris has a more or less similar policy target: to at least double cycling's modal share to approximately 5-6% of all journeys by the 2020s (Steely White, 2013; GLA, 2013; Mairie de Paris, 2010).

Targets for motorised traffic reduction are however less consistent or explicit. In London, the Mayor's Transport Strategy (GLA, 2010: 16 and 36) noncommittally states that a 6% decrease in private motorised transport 'could be achieved' between 2006 and 2031 and that 'thinking

¹ Predict and provide is 'based on governments predicting traffic growth, then providing for it, and the growth then occurring' (Urry, 2008: 347).

differently about travel to encourage a shift away from the private car' would reduce congestion and improve the environment. The New York City Department of Transportation's first strategic plan (2008a: 3 and 31) makes only two similarly vague references to 'reducing private auto use', including the department's role in 'making it easier for New Yorkers to choose more sustainable modes of transportation and reduce the use of private vehicles'.

Paris is meanwhile a different story, with a notable aim of the Paris Mobility Plan (Plan de Déplacements de Paris, PDP)(Mairie de Paris, 2007: 58) to reduce motorised traffic by 40% by 2020 (from a 2001 baseline). Indeed the 'primary objective' of this plan (Mairie de Paris, 2007: 55) is 'to ensure the availability of transport options that combine a decrease in automobile traffic with an increase in its alternatives'. It intends to 'give priority to developing alternatives to the car', and correspondingly, to phasing-in 'new restrictions on the space dedicated to car traffic' (Mairie de Paris, 2007: 54). The plan's targets are a reflection of the statutory commitments of French cities to reduce private car use. According to the Paris region's Urban Mobility Plan (Plan de Déplacements Urbains Ile-de-France, PDUIF) (Conseil Régional, 2012: 119), the model of unrestricted automobility 'has reached its limits'. Moreover, in order meet its goal of a 2% reduction in car and motorised two-wheel traffic (between 2012 and 2020),² the plan states the seemingly otherwise unsayable: efforts to encourage cycling, walking and public transport are alone 'insufficient'; 'it is also necessary to act on the terms governing the use of the car' (Conseil Régional, 2012: 119).

These targets correspond to a range of policies, which are discussed next. Notably however, targeted policies are *not* thought to explain current travel behaviour trends (i.e. increased cycling and decreased driving). As Goodwin (2012a) argues, policy-based explanations are unlikely as they would be at odds with what we know about the sensitivity of behaviour change³. What is more likely, he argues, is that current trends in travel behaviour influence the *feasibility of developing certain policies*, 'especially those intended to encourage less car-dependent lifestyles' (Goodwin, 2012a: 15; see also Goodwin and Van Dender, 2013).

In light of all this - the above policy targets, aforementioned trends in transport governance and in travel behaviour itself - the following examples account for some of the more high-profile, high-

² The significant difference in projected motor traffic reduction between the PDP (40%) and the PDUIF (2%) seems to be explained mostly by the different time periods each plan covers, with the PDP (2001-2020 accounting for an additional 11 years compared to the PDUIF (2012-2020). Indeed, the PDP specifies that a 14% reduction in traffic is projected between 2013 and 2020, which brings it closer in line with the PDUIF's 2%. Moreover, the PDUIF accounts for the wider Paris region, the outer areas of which are more car-dependent.

³ See also Urry (2008: 348 on Geels, 2006) on 'the sheer impossibility of change being brought about by a single 'policy' as such.

^{4 &#}x27;It is a government's duty to provide for people to move without a car' (blog commenter Rob from Really Useful Bikes in Dunckley, 2013).

budget or highly-controversial cycling-related transport policies implemented in each city within approximately the last decade⁵.

Cycling-Related Transport Policy in London

As part of a wider culture of devolution in the UK, the Greater London Authority was established in 2000 and shares responsibility with borough councils⁶ for diverse functional areas, including transport. The GLA and its operational body responsible for transport, Transport for London, are led by the city's mayor, currently Boris Johnson (Conservative, 2008 - present), a self-described and popularly-known 'passionate cyclist' (Johnson in GLA, 2013: 5). Indeed cycling is 'integral' to his public persona (Hill, 2013c):

the Mayor [...] is obviously very identified with cycling so his reputation is quite dependent on how he does on cycling, so in that respect it's very, very important and it's become very important to TfL (London city official Annabelle)

During Johnson's tenure, the city's first cycling commissioner was appointed and a number of flagship policies (notably 'cycle superhighways' and bike share) were launched (TfL, 2010). More recently, his latest policy document outlines plans for 'more Dutch-style, fully-segregated lanes', stating: 'with the proviso that nothing must reduce cyclists' right to use any road, we favour segregation' (the significance of which becomes more apparent in sections 4.3, 5.3 and 7.3) (in GLA, 2013: 5 and 12). Despite these seemingly favourable circumstances however, London participants in this project were cynical:

Boris Johnson has portrayed himself as a very cycle-friendly mayor [...] the public have to some extent been misled by what he's done because a lot of his policies are kind of anti-cycling [...] but because the average Londoner sees him on a bike and knows about the Boris Bikes⁸ scheme, come the next election he'll be able to campaign as a pro-cycling mayor (London consultant Nigel)

cycling allows [Boris] to have green credentials that he probably doesn't actually have [...] bike hire is [...] a vanity scheme (London campaigner Rosemary)

^{5 &#}x27;Almost every one of these cities has a moment they point to [...] this realisation that you need to invest in cycling [...] and it's all within three years of each other, it's all between 2006 and maybe 2009, mayors with very different politics, with very different cities and they're all getting it in a very very short window, so there's definitely a story to be told there about first communications networks between these mayors, between these cities' (New York blogger Nick).

⁶ TfL only owns five per cent of the roads in London', with the rest 'owned by the 33 borough councils' (GLA, 2013: 17).

⁷ The superhighways are the subject of particular scrutiny, with five cyclists having been killed on one particular route between 2010-2013, according to blogger Ames (2013).

⁸ As they are popularly dubbed despite being conceived during his predecessor's tenure.

there is this argument that Boris Johnson as a figurehead is good for cycling because he's a quote 'normal cyclist' [...] but I don't think it necessarily shapes policy all that much (London journalist Paul)

The creation of the position of mayor, as well as TfL and the GLA has, Marsden and May (2006: 23) argue, 'brought about substantial changes to transport policy', including and especially congestion charging. The perceived merits of London's governance structure were also noted by blogger Brad in New York, where a similar scheme was shot down in 2008:

London was the only one [of this project's three cities] that was able to put a congestion charge through, but I think that's as much due to the political structure of London government as their will to do it, we basically did more legislative activity to [try to] pass congestion pricing here than they ever had to

Finally, cycling safety has become an election issue in London, with the first 'cycling hustings' (Allen, 2012) in 2012 indicative of 'the remarkable changes that have happened in the capital with regards to cycling' (Edwards, 2012b).

Cycling-Related Transport Policy in New York

The main government agency responsible for cycling in New York is the Department of Transportation, one of whose goals is to encourage 'sustainable modes of transportation' (NYCDOT, n.d./1). The DOT seeks input and recommendations from the transportation committees of the city's 59 *community boards*, 'the foundation of democratic, community-based planning in New York City' (TransportionAlternatives, n.d./1 and n.d./2). The mayor meanwhile provides its strategic vision, and the legacy of Mayor Michael Bloomberg's (Republican, 2002-2013) particular vision, according to the *New York Times*, includes:

a war of attrition with the automobile. He sought to transform bicycling from a recreational activity into a real alternative to cars (Fessenden et al, 2013)

In 2007, Bloomberg appointed a new DOT commissioner who would become a figurehead of sorts for a 'new' New York, the streets of which she described as otherwise having been in 'suspended animation for 50 years' (Holeywell, 2013):

Sadik-Khan has transformed the role of her office by placing a serious emphasis on pedestrians and bicyclists [...] mak[ing] streets safer and more accessible to those who use modes of transportation besides driving

In contrast to Londoners' cynicism, many of those I interviewed in New York praised the city's leadership⁹ (and are quite possibly amongst those two-thirds of New Yorkers who do not regularly drive (Holeywell, 2013).

the mayor and the commissioner [...] started to take bicycling seriously in a way that it hadn't been before [...] there hadn't been an intentional, thorough investment in bicycle transportation (New York campaigner Claire)

the real sea change has been the administration [...] it has to do with [...] Mayor Bloomberg [...] with the considerable leadership of Janette Sadik-Khan (New York blogger Sara)

a lot of people look at New York City right now and the amazing stuff that Janette Sadik-Khan has done with the public realm [...] Janette's wonderful [...] what she's done has been incredibly smart (New York blogger Charles)

The miles of bike lane in the city are said to have increased by a factor of about 450 under the Bloomberg administration (Fessenden et al, 2013). Whilst some of these lanes segregate bicycles from motorised traffic, most are 'demarcated simply with painted asphalt' (Fessenden et al, 2013). A particular segregated bike lane in Brooklyn did however become 'one of the most closely watched controversies over a signature policy of the Bloomberg administration' (to which participants cited in later chapters repeatedly refer) (Grynbaum, 2011). Perhaps most famously however, in 2009 a relatively 'quick and cost effective' policy was launched as sections of Times Square and Broadway were closed to motorised traffic, with the resulting space redistributed to pedestrians and cyclists. Described by London city official Elisabeth, those efforts (which have since been made permanent with higher quality materials than those to which she alludes) were:

seen as quite radical, but cheap and cheerful interventions [...] creat[ing] public plazas by sticking up road cones and painting in cycle lanes [...] and it's like 'ta da, look we made a public space, we put out some tables and chairs and it only cost £3000' [...] it was [however] [...] pretty good value for money considering the transformative impact

⁹ See also blogger tributes: 'Thank you, Mayor Bloomberg and Janette Sadik-Khan!' (AstoriaBike, 2013) and 'Janette Sadik-Khan's Greatest Streetfilms Hits!' (Eckerson, 2014a).

¹⁰ And moreover, 'According to Streetsblog's estimates, less than one half of one percent of NYC's street network has been allocated to bikes, buses, and pedestrians under Janette Sadik-Khan.' (Fried, 2011b).

¹¹ Although as Sadik-Khan points out: 'Broadway is not famous because of the cars going through it' (in NYCDOT, 2008b: 39).

Both the plaza initiative and emphasis on bike lanes stem in part from the input of Denmark's Gehl Architects, commissioned¹² in 2007 by the DOT, who 'used Gehl's work to directly inform the implementation of new policies and projects' (NYCDOT, 2008c). Also in 2007, Mayor Bloomberg launched his sustainability initiative, which led to, 'for the first time ever, a clear and detailed transportation policy for New York City' (NYCDOT, n.d./4), as well as New York's first bus priority routes in 2008 (NYCDOT, 2013: 66). In 2014, new Mayor de Blasio launched his plan for improving street safety, based on a Swedish policy model that dictates 'all traffic deaths [are] inherently preventable' (Flegenheimer, 2014). Finally, New York launched a cycle hire scheme in 2013 and was the last of the three cities to do so.

Cycling-Related Transport Policy in Paris

The main body responsible for cycling in Paris is the Department of Roads and Travel (Direction de la Voirie et des Déplacements, DVD), which prepares and operationalises the Paris Mobility Plan (Plan de Déplacements de Paris, PDP) (Mairie de Paris, 2007: 58). The city's mobility plan must adhere to the principles of the city-region's Urban Mobility Plan (Plan de Déplacements Urbains Ile-de-France, PDUIF)(Conseil Régional, 2012), which in turn is a statutory commitment to national transport priorities for French cities, including reduced car use (see policy targets earlier in this section). Since 2002, Paris - like all French *départements* and indeed, central government - has its own 'Monsieur Vélo' - a cycling czar of sorts 'whose job it is to ensure that cycling is considered in any new transport infrastructures' (Dauncey, 2012: 221; MEDDE, 2012). The former Mayor Bertrand Delanoë (Socialist, 2001-2014) campaigned on a particular vision of transport, described to me by city official Gérard:

before becoming mayor he said to Parisians - despite it going against their cultural mentality - 'if I win the election, I will make the street a shared space'¹³

Responding to early criticism of his decision to expand protected bus lanes, Delanoë asked 'Why would I continue to give a quarter of Parisians [who regularly drive] 94% of the road space? It's unjust' (Delanoë in Le Nouvel Observateur, 2001). Over a decade later, *L'Express* asked 'Is Delanoë 'anti-car'?', whilst an automobile association issued a press release referring to the Mayor's 'autophobic ideology': 'Delanoë's urban mobility project [...] is a heap of anti-mobility

¹² Gehl was also commissioned by Transport for London and Central London Partnership in 2004 (Gehl Architects, 2004), but ten years later expressed disappointment by the lack of progress made on his recommendations: 'I have not been impressed [...] I have never felt the same urgency in this city as in other places' (Gehl in Hill, 2013a). See also McCann (2011) on 'certain policy consultants 'go[ing] global'.

¹³ In contrast to Delanoë's campaign promise and illustrative of how times have changed, Paris blogger Inès recalled the slogan used by former Mayor Jacques Chirac to encapsulate his transport vision 'only' 11 years prior to Delanoë: 'Paris wants to drive, we will help it'.

measures against our freedom of movement' (UNAC, 2012; Morvan, 2012). In addition to one of his signature cultural policies, 'Paris Plage' (Paris Beach), whereby every August a stretch of motorway bordering the Seine is closed to traffic and temporarily converted into a beach, Delanoë is perhaps most famously associated with having effectively introduced the concept of bike share to the world. In 2007, he was the first mayor to implement it on a large scale and as such, is credited with making it politically safe - and arguably attractive and necessary - for others:

we'd never have thought before that you could simply introduce tens of thousands of bicycles to a city which wasn't designed for cycling and it not be a complete disaster [...] [no]one would have had the nerve (London consultant Nigel)

Paris opened their scheme and then the whole thing became really quite important [in London] (London city official George)

a world city does that [and] other mayors can look [...] and go 'hey, that was good' [...] I mean Boris and Ken did it, they looked at Paris and said 'I want one of those' (European campaigner Leo)

Some of the underlying principles of 'Vélib" - a play on the words 'vélo' and 'liberté' - continue in the city's car share policy, Autolib', launched in 2011. The city's current 'plan vélo' (Mairie de Paris, 2010) introduced a policy allowing two-way cycling on 30kph streets that are otherwise only one-way for motorised traffic. It also introduced a policy allowing cyclists to turn right at or pass straight through red traffic lights (whilst yielding to cross traffic and pedestrians), in an effort to make the city more navigable by bike and to avoid common conflicts at junctions (Mairie de Paris, n.d./1). The plan also confirmed the opening of a Maison du Vélo - premises rented by the city where bicycles can be hired and repaired, where cyclists can get information and advice and notably, where three cycling associations are now housed (Mairie de Paris, 2010: 7; Mairie de Paris, 201; see section 4.3).

In addition to policies found in all three cities to temporarily close roads to motorised traffic and/or 'celebrate' cycling during annual events (e.g. London's Skyride; New York's Summer Streets; La Convergence in Paris), Paris Respire (Paris Breaths) entails the closure of some roads to motorised traffic every Sunday and public holiday (since 2001) with the aim of encouraging 'active modes' of mobility (Prosperi, 2010). Even then however Paris Respire (and Paris Plage) only temporarily permit Parisians to 'harmoniously cohabit with their river' (PDP, 2007: 117). As such, and as 'an expressway in the heart of Paris, a UNESCO World Heritage Site, constitutes without doubt an anomaly', the Paris Mobility Plan (PDP, 2007: 117) proposes the 'progressive reconquering' of the roads bordering the Seine - a proposal that began to be realised in 2012, with

approximately 3km of former expressway now permanently closed to motorised traffic (PDP, 2007; LesBerges, n.d.; Paris Chronicles, 2013).

Political Acceptability of Cycling

No account of the link between contemporary urban cycling and the state would be complete without some mention of what cycling has come to represent politically. Namely, not only is it more politically *acceptable*, cycling seems to have become *so* politically acceptable that it is now politically *unacceptable* to oppose it. In other words, 'nobody's against it' (European campaigner Leo). Participants in this project - many of whom have long 'cycling histories' - remarked on this shift. Campaigner Peter in Paris, for example, spoke of some individual and departmental representatives of the urban state-as-expert-system who he would not consider allies but who employ 'the right discourse' because now they 'cannot have anti-cycling discourse'. In London meanwhile cycling policy is recognised to have 'united the political right [...] and left' (Mayor Johnson in GLA, 2013: 5); at the last mayoral election, 'all four of the main parties [...] signed up to essentially the same things [to promote cycling]' (Cycling Commissioner Gilligan, 2013)¹⁴. London city official Annabelle told me that she can't imagine 'an anti-cycling mayor in the near future', whilst London journalist Paul stated:

it's very hard to find someone who's an openly dissenting voice because in theory, everyone is [politically] in favour of more cycling, it's like apple pie, everyone thinks it's a great idea [...] so, you know, we wouldn't be able to get a government minister to say anything other than 'what you do [to promote cycling] is wonderful, yes, it's brilliant'

Even in New York,¹⁵ where cycling is seemingly not quite the apple pie it is in London, New York bloggers Adam and Martin spoke of the perceived need some feel to be politically-correct about it. Indeed, as Adam describes, one of their fellow bloggers makes use of his blog precisely to mock such rhetoric:

the blog Brooklyn Spoke, he has this category [...] to tag posts called 'some of my best friends are bike lanes', ¹⁶ which is from this thing 'oh, some of my best friends are black people, some of my best friends are gay', like 'I've got nothing against gay people, I've got nothing against bike lanes, but *this*

¹⁴ See also Streetsblog headline: 'London Mayoral Candidates Vie to Be the Most Bike-Friendly' (Fried, 2012)

¹⁵ For example, one of the 2014 New York mayoral candidate made no mention of cycling in his 15-point transport manifesto, according to Streetsblogger Miller (2013c). The Brooklyn Borough President - 'a prime critic of bike lanes' (Gordon, 2013b) once referred to former Commissioner Sadik-Khan as a cycling 'zealot' (Aaron, 2010; Durkin, 2010). According to public opinion data collected by the Department of City Planning, New York Police Department is 'hostile and antagonistic towards bicyclists' (DCP, 2006).

¹⁶ See Gordon (2011) for a good example of what Adam is referring to.

one is really bad' so a lot of the opponents [...] do find it necessary to preface their anti-bike legislative initiative with some sort of statement like 'look, I love biking, I think biking is really important, we've got to do more to encourage biking, but I just don't think these protected bike lanes are a good thing for Brooklyn' [...] it's like we are at a point now where people do feel like they have to say something, like being in favour of biking is the right-minded thing, that being said [...] cars are not yet cigarettes in New York City¹⁷ (Adam)

it's the way racists talk about Obama, like they can't really say that they don't like him because he's black so they have to come up with 'oh he's a socialist, I don't like his policies', it's the same thing when they start debating the bike lanes [...] that veiled racism, it's like veiled car cultures really [...] [imitating redneck accent] 'not on my land' and 'they're takin' our jobs' [...] 'what I really want to say is that I'm a driver and this is hurting my freedom and privilege and entitlement to own a car', but they never want to say that so they're like 'it's about safety' [...] that's why [cycling] is hated so much, it cuts right to the core (Martin)

Given that cycling seems to have achieved some sort of protected status, it should be unsurprising that it has come to feature amongst the state's 'policy boosterism' strategies, or the 'talking up' of policies in order to enhance its reputation (McCann, 2013; 2011: 120; 2009; see also sections 4.2 and 7.1 on the state's public relation strategies as they correspond to cycling). Introspectively, boosterism aims to muster support 'by continually informing the local population of their global influence' (McCann, 2013: 22). Policies and policy-makers, such as those described throughout this section, become more difficult to criticise once 'anointed as 'best' by professionals [...] elsewhere¹⁸ (McCann, 2013: 22). As such, it is not difficult to locate official statements along the lines of:

The innovations launched by DOT are now seen around the world [...] [it] has helped position New York City as a global leader in the growing effort to create thriving, livable, and sustainable 21st century cities (former Mayor Bloomberg in NYCDOT, 2013: 4)

Extrospectively, boosterism may take a more competitive tone, with comparisons to other cities used to generate pressure to implement certain policies at home (see also section 6.3):

Are the roads for multiple uses [...] or are they just for motorists? When it comes to streets that safely serve all users [...] New York has fallen behind its competitor cities around the globe (former Mayor Bloomberg in Fried, 2010)

¹⁷ See Green et al (2012) on 'Driving is the New Smoking'.

¹⁸ This is especially useful if the interests cycling-related policy serves are perceived to benefit only a tiny local minority: 'the general public, i.e. the 80% of people who would never consider getting on bike, are possibly absolutely perplexed as to why so much emphasis is being placed on bicycles' (London city official Elisabeth).

In urban transport, cycling is now at the cutting edge [...] forward-thinking cities are investing [...] in the bicycle (TfL Commissioner Hendy in GLA, 2013: 7)

[cycling is] [...] arguably the single most important tool for making London the best big city in the world (Mayor Johnson in TfL, 2010: 3)

[NYC] has been very clever in their marketing [...] of the[ir] work [...] so it's seen as really innovative [...] there's probably a little bit of envy about [...] that, but with a head like Janette Sadik-Khan who spends most of her time travelling the world, plugging New York rather than actually being there, ¹⁹ then it's not surprising, but we're in the business of running the city [laughter] (London city official Elisabeth)

Section Summary: The State as an Expert System

At face value, the picture painted throughout this section casts cycling and the state in a glowing light: the state is taking action, cycling is on the up and has even become politically attractive. What could be the problem?

As implied by the apparent need to 'boost' and speak 'correctly' about policies that aim to increase cycling and decrease driving, obviously not everyone is in favour of them. Moreover, despite the state having 'become reflexive' about the social and environmental risks of automobility, the paradigm itself has not, as Beckmann (2001b: 604) argues, changed. The differences between rhetoric and reality are bound to result in tensions and contradictions, as illustrated in the below comment by New York blogger Martin:

the city swoops in with this great DOT commissioner who's bike friendly, swoops in with its bike lanes and its policy [...] but then [...] [they] basically called [...] an official crackdown on biking²⁰ [...] it's very Orwellian, they call it 'Operation Safe Cycle'²¹ which is like the Ministry of Love at war, and it [...] sets this tone that's like, on the one hand, 'Janette Sadik-Khan is welcoming you, get on your bikes [...]', and then you've got the cops slapping you with a ticket [...] so it's this real mixed message

^{19 &#}x27;DOT has sent its staff to make presentations at hundreds of community meetings, professional conferences, and transport forums around the world to publicize its efforts to promote cycling and to tout NYC as the "nation's bicycling capital" (Pucher et al, 2010: 44).

^{20 &#}x27;The backstory here is that the NYPD announced [...] they were going to get tough on cyclists' infractions [...][ticketing by] the NYPD [...] [increased] nearly 50%' (Seaton, 2011; Auer, 2011).

²¹ See also the Guardian bike blog.on London's 'Operation Safeway' (Walker, 2013).

The precise circumstances Martin describes about cycling being criminalised are less the point here than the mixed signal he is getting from the police and commissioner as representatives of the urban state. Indeed the point here is really just to close this section with the perhaps unsurprising suggestion that, as Martin alludes, all is not what it seems. Transport governance, policy discourse and policy development aimed at increasing cycling and decreasing driving obviously run much deeper than this section allows. The next chapter will however pick on these themes from the perspective of citizens seeking to engage with the state about them. Until then, the next section goes on to discuss instituted media as an expert system.

4.2 Instituted Media as an Expert System

Trust in the expert knowledge that enables abstract systems such as transport to function is 'liable to be strongly influenced' by media and the 'updates of knowledge' they provide (Giddens, 1991a: 90). Moreover, media may itself be understood as an expert system, insofar as expert systems are characterised by 'technical accomplishment or professional expertise' that contributes to the organisation of 'large areas of the material and social environments in which we live today' (Giddens, 1991a: 27). As with other expert systems, the media-as-an-expert-system relies on the public's trust, whilst the public relies on the media to expertly communicate risk-related information. All in all, media 'form an essential element of the reflexivity of modernity' (Giddens, 1991a: 77).

Amidst a wider media context that has over the last decade or so changed beyond recognition (whilst so too, it could be said, has the context of urban cycling, see previous section), media institutions and formats whose origins pre-date widespread internet use remain primary sources of information. These instituted, mass, mainstream or broadcast-by-origin sources influence and reflect understandings, attitudes and behaviours relating to risk, transport and policy, some of which I attempt to contextualise in this section, which (in four parts) discusses: 1) newspapers as a key source of information about transport; 2) the communication and perception of cycling as dangerous versus safe; 3) the shift towards more, and more positive, media coverage about cycling; 4) and the phenomenon of the urban state promoting cycling as part of their wider press, public relations and policy boosterism strategies.

Newspapers and Cycling

'The news media, and newspapers particularly, warrant investigation' when considering media representations of cycling, and as a point of departure into this section its worth noting Rissel and colleagues' (2010: 2 and 7) claim that individual newspapers tend to have 'particular approaches to

how they report [cycling] stories that range widely on the positive-negative spectrum'. In other words, 'you'll get certain papers that will have certain positions' on cycling²² (London city official Samantha) (see also section 5.2 on media's vested interests).

Without attempting to account for the entire press, it is worth highlighting a few examples illustrative of the 'spectrum'. The conservative *Le Figaro*, for example, has been 'consistently critical of the Vélib scheme, denouncing its costs, inefficiencies and technical problems in order to undermine the socialist-led Paris council' (Dauncey, 2012: 225). Sensationalist coverage by the *New York Post* meanwhile is partly to blame, according to New York blogger Charles, for triggering the city's 2011 crackdown on cycling (first referred to in the summary of section 4.1), whilst its reference to DOT Commissioner Sadik-Khan as the 'psycho bike lady' further typifies the paper's stance.²³ The London-based left-of-centre *Guardian* has regular cycling commentary on its Bike Blog, in addition to cycling news coverage. Also in London, and following one of its journalists being struck and seriously injured whilst cycling, *The Times* launched its 'Cyclesafe' campaign, the significance of which was noted in relation to other newspapers by participants in this research:

this level of exposure for a cycling campaign is pretty unprecedented especially for a mass-circulation, conservative newspaper, *The Independent* had a front page cycling story about four years ago but that wasn't such a big deal as it's a campaigning newspaper (London consultant Nigel)

the whole *Times* cycle safety thing, that was fascinating, there you've got a conservative paper [...] a Murdoch paper [...] rather than say, the *Guardian*, talking about cycling, everyone would go 'so what?' [...] that's what's nice about the *Times* campaign (European campaigner Jacob)

Mediating Perceptions of Risk

Road risk is a particularly important media framing of cycling given that concern about safety is one of the major barriers to its practice. TfL's (2012a: 79) *Attitudes Towards Cycling* survey, for example, found that of those Londoners considering taking up cycling, safety - or indeed, danger - is by far their greatest concern. Only 28% of respondents agreed that 'cycling is a safe a way of getting around', whilst 91% consider cyclists vulnerable to other road users (TfL, 2012a: 55 and 65). Of those who cycle less because they believe it is too dangerous, 9% cited 'press coverage' as informing their opinion (TfL, 2012a: 31). Indeed 50% of those surveyed recalled 'media stories about cycle collisions' (TfL, 2012a: 115), suggesting the possibility that London media may

²² When making such generalisations, it is important to remember that there are exceptions to the rule, such as when '*The Sun* broke ranks', according to blogger Williams (2013a).

²³ See also '[S]ensationalist fear-mongering, fabricated controversies and shameless victim-blaming continue to be the hallmarks of cycling coverage in New York' (Aaron in Streetsblog, 2012).

resemble those in Melbourne and Sydney, where Rissel and colleagues (2010) found the most common cycling news angles to be cyclist injuries and deaths - a finding that in turn seems to support the claim that media coverage privileges quickly-unfolding and tragic events, rather than, for example, a long-term downward trend in cycling fatalities (Anderson, 2006).

In contrast, despite approximately 3200 people being killed every day around the world in car crashes, 'their deaths are not spectacular enough to make it into the news' (Böhm et al, 2006: 10); the 'tragedy behind these figures attracts less mass media attention than other, less frequent types of tragedy' (WHO, 2004). The incentive to report critically on the risks of automobility may be dampened by its ubiquity, popularity and utility,²⁴ not to mention economy and most people's safe, everyday experiences with cars. 'The nature of automobility, the polemics of car culture, and the (mis)use of public space' are collectively, Furness (2007: 300) argues, 'an issue that is typically ignored by mainstream news in the United States' (indeed see section 5.2). Coverage of risk is therefore highly-selective and dependent on numerous factors, with the media capable of communicating some risks, whilst silencing others²⁵; of shaping 'which phenomena are identified [as] risks and how serious they seem to be' (Lupton, 2006: 19; Anderson, 2006; Beck, 1992).

Perceptions of risk are meanwhile 'as important as reality' (GLA, 2013: 18), and as I write this, London's cycling commissioner, ²⁶ is accusing the media of 'scaring people off cycling' (Gilligan in Laker, 2013). Whilst acknowledging that the mitigation of actual road risk *is* the responsibility of the city, he will not accept responsibility for the *political* risks associated with *perceptions* of those roads as dangerous as a result of media reports: 'We can do something about the roads but perceptions are largely in control of others, such as the media' (Gilligan in Laker, 2013). One such political risk, he suggests, is 'that future politicians²⁷ might say 'if that [negative press coverage] is the reward you get for spending a billion pounds [on cycling] what's the point in getting involved?" (Gilligan in Laker, 2013). As such, the commissioner demonstrates the 'agenda-setting function' of media representations and their connection with 'the climate of beliefs and values in which policies that support or hinder cycling are made' (Rissel et al, 2010: 1 and 2).

²⁴ One criticism of the risk society thesis is that its focus on the *risks* of modern science and technology comes at the expense of recognising their many *benefits* (Ekberg, 2007; Irwin, 2001).

²⁵ For example, repeat protests about transport risk 'get no mainstream coverage at all', according to London campaigner Mark... and 'a protest with no press coverage [is] pointless' (London blogger Matthew).

²⁶ Incidentally, described as 'a big media chum of the Mayor' given their stint together as journalists ('The Telegraph Twosome'), Commissioner Gilligan's appointment was met with accusations of cronyism, according to *Guardian* blogger Hill (2013c).

²⁷ The precariousness of investment in cycling in light of the impending end of the Bloomberg administration was noted by some New York participants, including blogger Martin: 'soon we'll get a new mayor and all these bike lanes are going to be gone'.

Shift Towards Favourable Media Coverage of Cycling

Academic interest in media coverage of cycling tends to focus on *negative* portrayals (see for example Fincham, 2007; Horton, 2007; Furness, 2007; Skinner and Rosen, 2007; although see also Daley and Rissel, 2011 and Rissel et al, 2010). Six years however after Horton (2007: 145) deconstructed the 'fear of cycling' and the media's role in 'making cycling strange', the mayor of London stated 'I want cycling to be normal' (Johnson in GLA, 2013: 5). To be fair, he (Horton, 2007: 146) saw it coming, noting that 'times are changing' in that Transport for London and the mass media are 'now representing cycling in more positive terms' (indeed see the next section and recall section 4.1). Indeed some participants in this project - particularly Londoners - made similar observations, noting a welcome²⁹ shift in the quantity³⁰ and quality of media coverage about cycling, with corresponding consequences for how it is generally viewed:

there's been a huge shift in the last 10 years, the *Evening Standard* used to be vehemently anticycling [...] [but now] virtually every edition [...] has some article which presents cycling in a really positive light, and the whole thing about the two-wheeled terrorist [...] is definitely on the wane (London blogger Daniel)

cycling was not much talked about in the media at all [...] the growth in positive coverage of cycling [..] the articles saying 'everyone's taking up cycling what a jolly good thing' tend to be more in-depth (London campaigner Rory)

there's definitely a perceivable shift in how cycling is viewed and how people see its role in the future (London city official Elisabeth)

for people who aren't advocates, and who aren't in that cycling world, [cycling] was emerging as a media topic [...] people were talking at cocktail parties about cycling, people who have nothing to do with cycling [...] that was when the message started breaking through for me that there's something happening with cycling in New York City (New York blogger Sara)

in terms of images and the representation of cycling, things are changing (Paris campaigner David)

^{28 &#}x27;Something is changing in the way that the UK media looks at cycling', according to blogger Williams (2013a).

²⁹ Although it is not welcomed by everyone: 'for the relatively low volume of people who cycle in London compared to the numbers that use the tube, buses or drive, they get massively disproportionate press coverage (Licensed Taxi Drivers Association, 2013).

³⁰ With the increase in coverage however, 'they're not just talking about the good stuff, they're also talking about cyclists being killed [...] so that increases the perception that cycling is dangerous' (London campaigner Rosemary).

Media and the Promotion of Policy

Why a shift in media coverage has apparently occurred is not to be comprehensively discussed here.³¹ Is it however worth drawing attention to the practice of the state actively promoting cycling as part of its wider press, public relations and policy boosterism strategies. The 'popular media' are used to 'construct narratives and mental maps' of policies and the people and places associated with them (McCann, 2011: 114); they 'frequently play a role in popularizing policy innovations' (McCann, 2013: 21; recall section 4.1 on policy boosterism). For cycling policy to be included in the mix would have seemed virtually unimaginable not that long ago - the significance of which European campaigner Leo noted:

to put your hand up and go 'I'm a cycling mayor', you don't actually become a laughing stock in your local media overnight, which it used to be

In London, city official Samantha told me that in 2005, the first press officer was 'brought in specifically to work on cycling' and that a team was subsequently assembled. Since then, she stated, there has been 'a very clear evolution' in how the city communicates and promotes cycling in the media. Judging by Samantha's subsequent description of that change, it can at best be said to conflict with claims that cycling 'transcends class, ethnicity, gender, sexuality and age' (McBeth, 2009: 167). Indeed, the media representations of cycling that Samantha and her colleagues help to generate arguably reaffirm what we already know about cycling in London as disproportionately a 'lifestyle choice' of affluent white men (Steinbach et al, 2011):

you need to make [...] cycling aspirational [...] so you got the advertising campaign which was [...] pictures of attractive, young people in nice clothes [...] on nice bikes, cycling around pretty places in London and that was a real shift [...] they used to just be any old looking person in horrible ugly old cycling clothes on a crappy old mountain bike [...] a deliberate decision was made [...] where they completely changed that and it became attractive people that other people would aspire to be like on pretty bikes [...] that market was just starting to open up [...] I was basically spoon-feeding the guys in *The London Paper* this stuff and saying to them 'go to this shop, look at this thing, you want to have this, this is cool [...]' and they were running double-page spreads in the newspapers and you'd have aspirational things [...] chic very expensive cycle-specific clothing [...] lovely looking things and you know, getting those in the newspaper [...] and then you start to see more and more of that stuff on the street (Samantha)

³¹ See Rissel and colleagues (2010) who found that positive newspaper coverage of cycling followed an increase in the practice of cycling itself.

Whilst the context Samantha describes is itself worthy of a thesis,³² here the essential point is that some media representations of cycling are the result of the state 'spoon-feeding' information 2) that reflects the 'aesthetic attitudes' and 'bourgeois sensibility'³³ of those Londoners already predisposed to cycling (Steinbach et al, 2011: 1126; see also McCann, 2013 on the commodification of policy). Some final points from Samantha on positioning cycling in the media:

people use [the cycle hire scheme] to promote London itself [...] use bikes in shoots [...] [we] do a lot of work to [...] get the bikes into photo stories, so things like trying to work with the GQs of this world [...] or different women's magazines [...] pitching them into lots of places, it's a great photo story [...] we were offering people opportunities to get filming opportunities of the bikes [...] they are new icons for London, London is associated with certain things, its red buses, its black taxis, you know, the telephone boxes, but [...] the cycle hire bikes are also in that mix now as well³⁴ [...] in our press releases we [...] talk about things like 'launching London's newest icon' [...] and get the press [...] repeating that back

In New York meanwhile, the state's promotion of cycling policy in the media is documented by Pucher and colleagues (2010: 43-44):

NYC DOT has vigorously advertised its accomplishments to garner support for its pro-bike policies [...] via television clips, press releases, newspaper articles [...] a masterful public relations campaign to generate political and public support [...] Effective communications through the media has been a key strategy of NYC DOT to promote its policies to increase bicycling [...] resulting in newspaper articles [...] portraying New York as a veritable bicycling paradise

Section Summary: Instituted Media as an Expert System

In summary, media representations of cycling may be understood as located on spectrums of positive-negative and dangerous-safe, with more recent ones influenced by policy boosterism and ripe for research. The next section moves on to contextualise the third and final expert system of concern to this thesis: cycling's civil society.

³² Because it is an understudied phenomenon (see section 9.2) but also to avoid repeating a previous bias, whereby writers whose 'strong beliefs about the nature of cycling' resulted in dominant portrayals of 'the bicycle as part of mass transport and working class leisure culture', whilst its 'earlier roles as a status symbol and upper/middle class plaything [were] treated with incredulity, or just ignored' (Oddy, 2007: 99).

³³ The potential of cycling to 'offer a certain bourgeois distinction' is, as Steinbach and colleagues (2011: 1130) suggest, perhaps not limited to London and may include 'other cities with low rates of cycling'. Indeed, in Paris, city official Gérard told me about the 'line of fashionable [Vélib] accessories' the city was developing, adding that, in terms of the Vélib (see section 4.1) 'brand', those accessories would be 'a bit like what New York does with the NYPD [...] to give more visibility to the service'.

³⁴ According to TfL (2012a), 7% of Londoners have used the cycle hire scheme, whilst 67% have 'no intentions' of using it.

4.3 Cycling's Civil Society as an Expert System

In his work on policy actors in London, Spinney (2010: 200) concludes that some cycling campaigners have increasingly 'become professionalized and 'expert'. Taking his conclusion as my starting point, this section contextualises cycling's civil society - understood here as formal advocacy organisations - by approaching it as an expert system reliant on the public's trust and on which the public relies to 'do what is best' for cycling.

Whilst there is a question of who exactly cycling's civil society represents - potential or existing cyclists of whichever type(s) - it does mediate between the private and public spheres; the public and the state; individuals and other complex systems of modernity (Aldred, 2013; Schlichter, 2010). This section provides an overview (in six brief parts) of cycling's civil society organisations; their disparities; their strategic preferences; the particular divisiveness in London relating to debates about risk, safety and integrationism versus segregationism; and informal advocacy networks and movement spin-offs.

Civil Society Organisations

Although participation in civil society is not defined by or limited to involvement in organisations, associations or other formal groups, such structures do nonetheless form a backbone to the movements or mobilisation of cycling's civil society (della Porta and Diani, 2006; Sheller and Urry, 2000). Some of the organisations in operation today, such as the UK's Cyclists' Touring Club and the League of American Bicyclists, trace their roots back to the bicycle's earliest days. Many more were established in the late 1960s to early 1970s, as motorised traffic grew along with discontent regarding social and environmental risks and consumer culture (e.g. Campaign for Better Transport, London Cycling Campaign, Mieux Se Déplacer à Bicyclette, Sustrans, Transportation Alternatives). In the 1980s, networks of organisations and localities were established, such as le Club des Villes et Territoires Cyclables, the Cycle Campaign Network (now Cyclenation), the European Cycling Federation and la Fédération Française des Usagers de la Bicyclette, as was the first of several groups best known for their direct action tactics (e.g. Critical Mass, Reclaim the Streets, Times Up, Vélorution). More recently, the Cycling Embassy of Great Britain was established in 2011 (see the end of this section).

Some of the groups listed above are represented by participants in this research, and although not intended to be a comprehensive list, these organisations do typify some the diversity found within

cycling's civil society. In terms of scale, for example, organisations operate hyper-locally (e.g. borough, arrondissement), locally, nationally and internationally.³⁵ The scope of operations meanwhile varies, as for some organisations concerned more broadly with transport or 'liveable streets', cycling may be but one of several related strands (e.g. pedestrians, public transport, road danger), whilst some groups that are arguably best known for cycling are also active in other areas, such as Times Up's work on community gardens or Vélorution and the concerns of 'other urban minorities' (Paris campaigner Luc). Organisations are moreover structured differently in terms of size, governance, funding and mediation with the state, media and public (e.g. the latter as members, donors, activists, volunteers, employees)(Aldred, 2013). These variations in turn reflect and shape different ideologies, strategic preferences and degrees of formality, institutionalism, hierarchy and centralisation. As London campaigner Rosemary explained:

you get more professionalised as you come up the scale [...] so big NGOs becoming institutionalised with government [...] you need organisations existing at the very far, very radical space to push, so you can generate new ideas and so that when these people are demanding absolutely outrageous things, you as the professional organisation can come in behind them and go 'well clearly that's too radical and we can't do that but how about we do this?', so they can open up new space

Most of the organisations listed above are at the more 'formal' end of the spectrum, although some (e.g. Critical Mass, Times Up and Vélorution) may be regarded as 'appeal[ing] to a different crowd' (Furness, 2007: 312). This is because the 'pragmatic appeals to environmental health, community ethics or physical fitness that are commonplace in formal bike advocacy', do not, Furness (2007: 312) argues, appeal to everyone who might be interested in participating in cycling's civil society. Indeed, some may 'express a radical indifference, if not hostility, to the role of organizations as promoters and/or coordinators of collective action' (della Porta and Diani, 2006: 132). Those who do not identify with any particular organisation may be drawn to more informal advocacy, although the role of the internet complicates dichotomies and distinctions (see the end of this section). Moreover, whilst Furness suggests the benefits of a diverse civil society that caters to all tastes with a little something for everyone, an alternative view sees the struggle to establish a common platform from which to advance against common adversaries.

Disparity Within Cycling's Civil Society

In addition to being cycling's most obvious advocates and defenders, civil society organisations are also highly disparate. 'What is best for cycling' is not understood in common terms, and thus

³⁵ That said, there is a case to be made for the particularly strategic role of cities for social movements (see Nicholls, 2008). As European campaigner Leo put it, 'cities are the engine [of cycling]'.

despite 'high levels of commitment and enthusiasm within cycling advocacy communities' (Aldred, 2013: 104), there is also a great deal of conflict:

cycle campaigning [...] is way too fractured, if you want to know about motoring you consult [...] the AA or the RAC Foundation, alright it's a bit fractured, but they're all pretty much on the same path, for us, it is very much divide and crawl (London blogger John)

cyclists are a nightmare in terms of everybody coming together, and some kind of cohesive campaigning, it's actually really really hard [...] with cycling, there is no right answer, like if you've got a bus, you want it to be regular, you want it to be cheap, you want it to come on time, you want it to be clean, but understanding what cyclists, like what makes cycling better, is actually [...] there's no consensus (London campaigner Rosemary)

I hate to even say this, it's playing the machine, but if you talk to civil servants, they would say the car industry brings us a business plan, the airline industry brings us a business plan, the freight industry brings us a business plan, the cycling industry brings us chaos, loads of self-appointed guardians, loads of this that and the other (European campaigner Leo)

Whilst such tensions are not unique to cycling (complex and conflictive internal relationships are common to most movements), as the above comments allude, battle-from-within 'substantially weakens a movement'³⁶ (Kriesi, 2004: 81). Cooperation and solidarity are compromised in the name of 'ideological purity' (Rucht, 2004: 212) or in defence of particular strategic preferences, ranging from radical to moderate. Exemplifying these tendencies, blogger Martin contrasts the strategic preferences of three groups in New York:

there's this weird rift [...] and it's really about tactics, because the Time's Up people say 'we don't need permits to ride our bike, take this to the streets', Critical Mass, action, lie down in front of the bulldozer, Transportation Alternatives is like 'no no no, as much as that's good and we're friends, write your city council members and do safety testing and go to your meetings' [...] New York doesn't have a bike coalition [...] 'we all get together and we come up with this unified message', New York really needs that

Likewise, in Paris, 'the cycling community is split in several groups and ideologies and different minds, which don't really get along so well' (campaigner Patrice). For example, campaigner Luc explained how his preferences for dealing with automobility differ from some of his peers with whom he advocates cycling on behalf of the same organisation:

^{36 &#}x27;The ability of our sector to fight with itself is just extraordinary [...] it really does fail to grasp the way politics works because what you don't do is get better solutions, what you get is confused politicians and you give civil servants an excuse to duck and dive' (European campaigner Leo).

I'm always very angry with some of them because they say we should now forbid all the centre of Paris to cars and they say 'no more cars next year' [...] maybe in 10, 15, 20 years it would be great, but the extremists or the radical side of these movements is not helping [...] it is necessary to have a radical aspect [...] but in my experience people who are deciding, the municipality, the Ministre de l'Environnement, Ministre de Transport, they cannot hear those kind of [demands] so the risk is to be categorised as just a few crazy anarchists

Indeed, although not in so many ('just a few crazy anarchists') words, Paris city official Gérard did speak of being 'amused' by the 'animosity of cycling organisations' that oppose Vélib on ideological grounds relating to its private funding.³⁷ Most likely Gérard was referring at least in part to Vélorution, one of the "militant' cycling associations' whose opposition to Vélib as the 'perceived 'neo-liberal' take-over of individual utility cycling' is described by Dauncey (2013: 225):

The Vélib scheme has suffered criticisms that might be deemed more 'ideological', emanating principally from the essentially left-wing cycling organizations [...] Vélourution, for instance, has been dismissive of what it sees as an unholy alliance between the socialist mayor of Paris and the commercial advertising empire in charge of what should rather be - in their view - a collectively provided, publicly run and free-to-the-user service

In obvious contrast to Vélorution is Mouvement de la Défense de la Bicyclette (MDB): 'nice people, very smiley, you know' (Luc). Making the relationship between the two organisations and their 'two philosophies' (Luc) particularly interesting is that both are housed together at the city's official Maison du Vélo (see section 4.1). So, despite not sharing common ground figuratively, they do literally, and moreover it seems, 'at least agree to 'peaceful co-existence' (Kriesi, 2004: 81):

you can actually see with your own eyes the compromise in the Maison du Vélo because it's separated in two spaces [...] they have different entrances [MDB at the front, Vélorution at the back - 'the dark side'] [...] but they do co-exist for sure, they have to find a common position (Luc)

Integrationism and Segregationism: Conflicting Strategic Preferences in London

If cycling's civil society within each New York and Paris are disparate, London's - and moreover, the UK's - could be described as divisive: 'a split and disconnected group'38 (Edwards, 2013).

³⁷ The source of Gérard's amusement recalls the previous section's discussion of constructing official representations of cycling: 'some associations say that people who use Vélib are not 'real cyclists', and that's quite amusing as [the city] is discovering that people who cycle do not want to be 'cyclists', Parisians who use Vélib' want to be Parisians, they do not want to be cyclists with the helmet, hi-vis clothing... they do not want to be 'cyclists', they want to be Parisians on Vélib'.

³⁸ See also 'the wretched history of infighting in the cycling advocacy 'community" (Psychobikeology, 2012a) and 'If you want to be a proper cycling campaigner you really must pick a side on all the big points of

There, the 'sub-chasms that exist within the cycling world' (London blogger Andrew) appear to be result of two interwoven issues (neither of which were expressed by participants in New York³⁹ or Paris): 1) *integrationism* versus *segregationism* as opposing strategic preferences⁴⁰ 2) the relative flexibility of civil society organisations to deal with the ensuing dissent and debate (see section 5.3). The risk these particular battles pose to the progress of cycling as a movement was articulated by London blogger Andrew:

one of the reasons cycling hasn't made more headway is because there's a lot of disagreement [...] it's difficult to get a coherent 'the way forward for cycling is to have separate lanes', you can't even reach that statement because there's so many different groups within it

Integrationism is essentially the belief that motorised and cycle traffic should integrate with each other and share road space that is designed accordingly, rather than be physically separated from one another by infrastructure designed to segregate modes (segregationism). Integrationists oppose segregation primarily on the grounds that it is seen to compromise cyclists' right to the road, whilst segregationists argue that cyclists should have the right to their own dedicated space and that the type of cycling⁴¹ demanded by integrated road conditions is unappealing, unsuitable and unsafe for most people. In other words:

it's [...] a philosophical thing, I think some cycling organisations [...] find it difficult to let go of this theoretical idea of 'let cyclists be part of traffic, we're not special, we don't have to be special, we shouldn't be shunted off the roads' [...] and this other philosophical trend, which is 'assert our rights as road users', and it is very much these two competing trends, it's almost idealism versus what's actually going to get more people on the roads (London journalist Paul)

The risks that automobility poses to cycling are fundamentally at the heart of both approaches; integrationism and segregationism are effectively two strategic preferences for dealing with those risks, without which, these particular debates about 'what is best for cycling' would either be extremely different or not exist at all. Integrationism has long⁴² been privileged⁴³ in policy and

discord so you can have some fun beating up the opposition' (Psychobikeology, 2012b).

³⁹ See Streetsblogger Miller (2013b) on segregated bike lanes being less of an issue in New York than London.

⁴⁰ Otherwise known as 'the big infrastructure bunfight', according to blogger Psychobikeology (2012c).

⁴¹ So-called 'vehicular cycling' is to operate a bicycle in the same manner as a motorised vehicle in terms of using the same road space, obeying traffic legislation and asserting one's right to the road (Franklin, 2007; Forester, 2012).

⁴² The idea of mixing [cycling] with the traffic took hold in cycle groups in the 1930s and the ideology has been reproduced ever since, handed down through generations of activists' (blog commenter paul gannon in Dunckley, 2013). See also '75 years after the UK's first cycle lane opened, the same debates rage on' (Walker and Rodrigues, 2009).

⁴³ Recalling her comment at the start of this section about advocacy's radical-moderate spectrum, London campaigner Rosemary suggested just how 'radical' segregationism is perceived to be when stating 'I don't know whether somebody coming in and being very pro-segregation might open up some new space

advocacy circles in London and the UK nationally, although a new wave of segregationism - *neo-segregationism* - seems to correspond to heightened disparity⁴⁴ (Aldred, 2013; della Porta and Diani, 2006; Whittier, 2004). This is apparent in both the discourse found within policy blogs (see section 5.3), as well as the implicitly segregationist outcome⁴⁵ of the London Cycling Campaign's canvassing its members to determine which foremost campaign issue the organisation should prioritise leading up to the city's 2012 mayoral election (see also section 7.3).

With concerns about automobility underlying these debates, a resurgence of interest in segregationism corresponds to an increased focus on road danger and cycling safety. Or alternatively, as London campaigner Rosemary suggests, increased media focus on road danger (see section 4.2) lends to a resurgence in segregationism:

increased media coverage of cyclists' deaths gives the pro-segs people a very easy 'in' to the debate

Similarly, the BBC's London Transport Correspondent connects an increased advocacy and media focus on road danger with actual policy shift in London towards 'safe, segregated cycle lanes' (Edwards, 2013). That is, safety becomes associated with segregationism (and segregationism with 'hope' insofar as it is an alternative to the status quo), whilst danger unsurprisingly is associated with the integrated roads on which collisions currently occur.

Neo-segregationism therefore accentuates several already-fine lines advocates face by: 1) drawing attention to the danger of cycling (with motorised traffic) in order to make it safer and more appealing 2) making cycling seem too dangerous and therefore putting people off it (Horton, 2007) 3) ignoring danger and instead focusing on cycling's positive features 4) making cycling appear too safe and possibly therefore less demand-worthy in advocacy terms (see section 5.3 on civil society's perceived insufficient demands being a reason for some to blog). In any case, there are incentives for cycling to be understood as both dangerous and safe in order to justify advocacy efforts to make it better.

down at this end of the debate'.

⁴⁴ Blogger Dunckley (2011) on the other hand suggests that the growing pro-segregationist climate means that cycling advocacy is 'approaching a consensus' or reaching a 'tipping point'.

^{45 &#}x27;Love London, Go Dutch was a campaign calling for the Mayor of London to make our streets more liveable for everyone by making them as safe and inviting for cycling as they are in Holland' (LCC, n.d./1) and 'to build continental-standard cycling infrastructure' (LCC, n.d./2).

Movement Spin-Offs and Informal Advocacy Networks

The Cycling Embassy of Great Britain⁴⁶ was founded in 2011 'out of disillusionment with existing cycle infrastructure and cycle campaigning' (Aldred, 2013: 92), and more specifically, in response to the 'campaigning establishment['s] prejudice[] against Dutch-style, segregated provision' (London consultant Nigel). In other words, the CEGB is a manifestation of neo-segregationism that was not absorbed by existing advocacy organisations and hence may be regarded as something of a movement spin-off (Whittier, 2004; see section 5.3 on the inflexibility of advocacy organisations being what prompts some to blog). As such, London blogger James spoke of those who are 'actively hostile against the campaign establishment and how it's been going for the past decade or two [and] are going in their own direction'. He described the CEGB as aiming to be 'specific experts in this one area', 'a consultancy' of sorts for those wishing to learn more about segregationism, but not a 'rival' or 'alternative' to existing groups.

The CEGB was initiated by bloggers already communicating about segregationism online but keen on 'it moving out of the blogosphere' (James). Relative to more traditional groups, internet-based advocacy is highly-individualised, decentralised, informal and independent, with actors connecting loosely via multiple advocacy strands rather than formal membership to any one. In Beck's (1996) terms, one could say it is *subpolitical* (see section 2.2). Examples of such 'webs of informal exchange' are diverse and entail offline meet-ups in addition to interaction online (della Porta and Diani, 2006: 131). They include, for example, the Movement for Liveable London and its Street Talks, described as:

a series of events which are organised in a pub in London [...] the Movement for Liveable London [...] seems to be just a website, it's not a society as such, but they organise a series of talks on issues around urban design and planning and liveable cities (London blogger Daniel)

getting lots of organisations together [...] we can all find each other on the internet these days, here's a physical place where we can [...] talk and exchange ideas (London blogger James)

⁴⁶ The 'cycling embassy' concept originated in Denmark, then the Netherlands, as a means of consolidating, exporting and capitalising on each country's respective expertise. The UK Embassy is more import-orientated and aims to redefine road safety; lobby government; gather and communicate knowledge; challenge barriers to cycling (CEGB, n.d./2; see also section 6.3 on mobilising best practice policy knowledge.

Section Summary: Cycling's Civil Society as an Expert System

In summary, cycling's civil society organisations range from radical to moderate depending on their strategic preferences. These include integrationism and segregationism, which are the source of particular divisiveness in London (and the UK), where informal and online advocacy networks have emerged as an alternative to the campaigning establishment and thus may be considered subpolitical. The next and final section of this chapter moves on to discuss the cycling-related transport policy blogospheres of London, New York and Paris.

4.4 Cycling Policy Blogospheres

In the trust-dependent relationship between 'individuals and the complex systems of modernity' (Schlichter, 2010: 7), the preceding sections of this chapter focus on the *systems* aspect. This section by contrast is concerned with their other half: the public. More specifically, it considers a particular collection or collective pattern produced by some individuals or parts of that public: blogospheres - *networks of blogs* - that communicate about cycling-related transport policy.

Blogs and other internet technologies may be interpreted as reflecting and affecting *individualisation* as a key characteristic of late modernity, whereby reflexive and self-steering individuals - rather than pre-determined social structures - have become the primary unit of social life (Beck and Beck-Gernsheim, 2001; Rainie and Wellman, 2012; see section 2.2). Faced with more choices and decision-making responsibilities than in the past, combined with their distrust of expert knowledge, 'individuals now place greater emphasis on seeking information about available options', which of course, is done ever-increasingly online (Ekberg, 2007: 354; see section 5.4). Consumption and indeed a 'deluge' (Caplan, 2000: 23) of information meanwhile necessitate critical reflection, which is enacted in part through self-expression, content production and communicating with others, as facilitated by the affordances of the new media model (see section 3.1). Traces of these processes, including attitudes of trust in and strategies for coping with transport and other abstract as well as expert systems, may be found in informal, self-organising networks of online communication, such as blogs.

The purpose of this section is to briefly contextualise each city's cycling policy blogosphere, as well as to paint a picture of the more collective one that spans all three. My purpose is not to pinpoint a sample of blogs (although purely for illustrative purposes, see some examples in Appendix A) or to pretend to have solid knowledge about something as fluid and evolving as the spheres that

together these blogs form. Rather, the idea is to present a panoramic snapshot of them as a highly-mobile and hence somewhat out-of-focus subject.

Collective Overview: the Cycling Policy Blogosphere Spanning London, New York and Paris

Policy bloggers attempt to raise awareness of and make a difference to policy, as introduced in section 3.1 (McKenna, 2007). Cycling policy blogs represent a minute proportion of the blogosphere, although it is impossible to quantify an exact number without precise criteria, such as date (blogs come and go) or topical or stylistic scope, because even something as seemingly narrow in focus as 'cycling-related transport policy blogs' is likely to cover a diversity of topics in a diversity of ways (e.g. urban politics, representations of transport/cycling, advocacy, road danger/safety, quality of life, different modes of transport and intersecting policy areas such as health and sustainability) and hence be about much more than bicycles per se. Indeed, as one Londoner wrote three years after starting his blog: 'I've never written a blogpost on the subject of bikes before [and] I've just written about 150 posts on cycling' (Arditti, 2013a). Some blogs meanwhile, which are clearly concerned with cycling policy may not even be defined (by their bloggers or by others) as 'cycling policy blogs' per se (see later in this section on New York).

Across all three cities, the earliest such blogs began to appear from around 2006, although the bulk of them emerged from 2009 onwards. Although my interest is in those blogs that are dynamic enough to have new content posted regularly, there are of course some blogs that have fallen by the wayside or ceased to be updated altogether⁴⁷, just as there are new blogs that have emerged since this project began or after I completed fieldwork⁴⁸. In terms of the individuals behind the blogs, without surveying each of the bloggers, it is impossible to provide an accurate depiction of who they are demographically, as the information bloggers choose to publicly reveal about themselves varies. That said, based on online profiles and interviews, it is safe to say that most are white men, reflective of the gender (and presumably racial) imbalance that 'still dominate[s] the bulk of transport policy-making, urban spatial policy and professional [transport] education'⁴⁹ more broadly, not to mention the practice of cycling itself in London, New York and Paris (Greed, 2008: 244; Fried, 2011a; NYCDOT, n.d./2; ONS, 2014; TfL, 2012c; VV, 2012). Moreover, most of the blogs considered here are individually-authored, although approximately two or three are multiauthored (although of those, only one person tends to author each post). Geographically, all of the

⁴⁷ For example, Freewheeler stopped blogging in 2011, but suddenly resumed again one year later, albeit only for three months. Likewise Hembrow (2012a) stopped and restarted (2012b).

⁴⁸ See for example PasDeVoiture (n.d.)

⁴⁹ See blogger Dunckley (2013) on 'the men (for it is they) who invite each other to discuss cycle campaigning'.

bloggers are either based in or blog regularly about one of the three cities in question (i.e. not all the 'London' bloggers necessarily live in London but they do blog about it regularly).

London's Cycling Policy Blogosphere

Compared to those in New York and Paris, London's bloggers are the most numerous, seemingly 'most active' and critical, as well as 'the loudest on the international scene' (European campaigner Jacob). At least 20 or so blogs critical of cycling policy exist, almost all of which are independent in that they are maintained by individuals for whom blogging is typically not their paid profession, but rather, 'a part-time enterprise undertaken for love rather than money' (Farrell and Drezner, 2008: 16). Whilst later chapters (6 and 7) will discuss the difference their blogging has made, here it is telling that the phenomenon has attracted the attention of the BBC, whose London Transport Correspondent, Tom Edwards, asked back in 2012(a): 'Has a new wave of cycling bloggers changed the debate?' He went on to argue that:

anger amongst cyclists has increased as the popularity of cycling has increased, but the message has in the last year or so become politicised and targeted. That's perhaps in part due to the campaigning cyclist bloggers who have given a focal point to the anger

A unique characteristic of London's blogosphere is its dedication to and apparent role in the revival of segregationism (see previous section and 5.3 and 7.3). Correspondingly, London bloggers tend to focus on road risks, to the extent that they have initiated and organised physical demonstrations to raise awareness of and protest against the dangers posed to cyclists. This includes protests against the redesign of Blackfriars Bridge,⁵⁰ as well as a 'Tour du Danger' around London's '10 most dangerous junctions for cyclists', organised in 2011 by bloggers Mark Ames and Danny Williams

because none of us should have to fight to make our way to work [...] [or] feel afraid taking our children to school [...] Designing public spaces which exclude people on the basis of their ability [...] is designing in danger, and designing in inequality [...] these places are inherently dangerous, and it is negligent in the extreme not to act (Ames, 2011)⁵¹...

⁵⁰ See blogger Williams' (n.d.) 'Blackfriars - a timeline of everything you need to know'.

⁵¹ For the event's press release see Williams, 2011h).

New York's Cycling Policy Blogosphere

In New York, the number of blogs in question are at least half what they are in London.⁵² What New York lacks in quantity however it is at least partially compensated for by the strength of one particular blog, Streetsblog,⁵³ the self-described 'marquee news source in the movement for sustainable transportation and more livable cities' (OpenPlans, 2011: 10). In contrast to most of the blogs in London, Streetsblog is instituted in the sense that its bloggers are paid and that it is one of the projects of OpenPlans, a non-profit technology organisation 'working to create better transportation systems and a more open civic sector'. More specifically, OpenPlans aims to open up data (by building software, working with public agencies and reporting on urban issues) and to 'transform our transportation system by reducing dependence on private automobiles and by improving conditions for cyclists, pedestrians and transit riders' (OpenPlans, 2011: 4). Together with 'sister' blog Streetfilms, which produces short films showcasing 'smart transportation policy' (OpenPlans, 2011: 11), Streetsblog was founded in New York in 2006. In addition, there are three other Streetsblogs based elsewhere (Los Angeles, San Francisco, Capital Hill), as well as the Streetsblog Network of hundreds of like-minded but independent blogs across the country.

As much as it is concerned with cycling policy, Streetsblog is not a 'cycling policy blog' per se. Indeed one person told me that Streetsblog is 'beyond just bicycling'. Its bloggers, as well as other bloggers in New York are more likely to refer to 'liveable streets blogging'. For example, Darren and Charles, who are evidently concerned with cycling policy in New York judging by the content of their blogs, spoke of the need for themselves and other bloggers to frame their arguments as being about much else besides:

one reason I hesitate to say I'm a cycling blog is because if you eliminated all bikes from New York City right now, there [would be] still so many sections [...] horrendously awful for pedestrians, and until we fix that part of it, the cycling stuff should just [...] be an after-effect, I don't care if people can bike to and from work if a little girl gets killed crossing Delancey Street on her way home from school [...] everybody in New York has to walk [...] and taxis are lined up on the sidewalks in this city [...] I mean, [my blog] is about biking, but it's more about the overall sense of making streets safer (Darren)

the more you can broaden the argument about the health of your children, about your own health, about to be able to go for a peaceful walk in Central Park, it's a bigger issue than people realise so any way you can tie it in to anything else (Charles)

⁵² In addition to Streetsblog and Streetfilms, 'there are handfuls of bike blogs in New York City that are doing more nichey-style stuff' (New York campaigner Claire).

⁵³ For more background on Streetsblog see (Chan, 2007).

Cycling Policy Blogosphere of Paris

In Paris, blogging about cycling policy is not nearly as common or understood as it is in London and New York: 'There are very few cycling blogs in Paris' (Bruno, one of two bloggers I interviewed there). Indeed referring to himself and fellow campaigners, Patrice stated, 'we are very busy [...] nobody thinks about blogging' (see also section 8.1). Two notable exceptions include one of the three cities' few female bloggers, as well as the city's own official blog, Vélib et Moi. Unlike the name implies, Vélib et Moi is not limited to information about the bike share system, but speaks more generally to cycling in Paris. Its purpose, city official Gérard told me, is 'to create links between people, to facilitate exchange'. Insofar as it is instituted by the state, Vélib et Moi is unsurprisingly uncritical in the sense of the policy blogs this project otherwise considers. On the other hand, its reader comments often are⁵⁴, and by not censoring them, the city hopes that the blog aides in confining that criticism:

[Vélib et Moi] is a means to avoid everything being spread on the internet, that is, if you want to complain, and this tool did not exist, you would go to a multitude of different sites to say you're not happy with Vélib (Gérard)

Most people I interviewed in Paris were not aware of or even particularly interested in the concept of cycling policy blogs. Campaigner Luc, for example, when asked if he saw any potential in such blogging to make a difference, replied:

no, because it's not a basic need, democracy or freedom of speech or even healthy food is a basic need, riding a bike is not a basic need, freedom of transportation is just a choice of modality [...] personally I don't believe

Campaigner Patrice on the other hand seemed to be intrigued by the concept following his discovery of the blogs in London, links to some of which I emailed him prior to his interview in an attempt to prompt discussion:

you sent me the links [...] and I was really surprised because they are indeed more advanced than we are maybe in France, I hope things are going to go faster [...] when you read all these blogs, and how many people get run over and all those protest rides⁵⁵... I saw this link to a site which shows on

⁵⁴ To take just one example, Vélib et Moi reader Emilie commented on a particular post precisely because she thought it was not critical enough: 'It is appropriate (and objective) to not only consider positive points [...] While I welcome the increased number of [Vélib] locations and your friendly promotional initiatives, I deplore, like other [Vélib] users, the significant disruptions to the service' (Vélib et Moi, 2014).

⁵⁵ Patrice was referring to the Tour du Danger, which coincided with his interview (see earlier in this section on London).

maps all the accidents that there have been, that's good, we don't have that [...] from my own experience, the internet has been the main source [of information about cycling] but I haven't been looking around enough probably

Another obvious difference in Paris compared to London and New York is language, and whilst Patrice happened to be well-versed in English, other participants referred to tapping into Swiss, Belgian and Canadian information networks, as well as others elsewhere in France⁵⁶. Whilst language obviously does not explain the relative lack of blogging in Paris, it does, along with 'English being the lingua franca' (European campaigner Jacob), have other consequences:

I'm weakest on Paris [...] you don't hear about developments or infrastructure or policies or proactive work other than Vélib, so Paris' cycling reputation internationally is built on one scale, I'm sure there's far more going on [...] maybe it's a language issue but there isn't a community telling the French story (European campaigner Leo)

Section Summary: Cycling Policy Blogospheres

In summary, blogs critical of cycling-related transport policy began to emerge around 2006, are most likely to be found in or discuss London, are virtually non-existent in Paris, and in New York centre heavily around Streetsblog. They tend to be written by white men, cover a range of topic areas and provide insight into attitudes of trust in and strategies for coping with transport and its expert systems.

4.5 Chapter Conclusions: Context

Looking back, it is apparent that the three expert systems contextualised in this chapter are characterised by a heightened awareness of transport risk and, each in their own way, are undergoing shifts in their approach to cycling. Policy-makers and instituted media acknowledge the value of cycling in ways they did not only a few years earlier, whilst advocates - in London anyway - are revisiting the very foundations on which their own policies rest. Around the same period these shifts began to emerge, so too did another system. Internet technologies, including blogging, have changed the way we communicate about transport and interact with its policies. At the same time, all of this coincides with another shift - in transport itself - characterised by increased cycling and decreased driving in these and other cities.

⁵⁶ For example, the Lyon-based website, Actuvélo, was launched (when I was in Paris conducting interviews) because: 'Information about cycling has not ceased to multiply on the internet. [We] therefore wished to create a site that allows both a general overview and news updates about cycling [...] [We] wants to serve as a tool that contributes to informing those in the world of cycling'. (Actuvélo, n.d.)

This chapter thus alludes to the potential for tension to arise between new and old ways of doing things; between individuals and institutions originating in different stages of modernity; between systems originating in different stages of modernity; between transport and communication about transport; between awareness of risk and what to do about it. Having thus 'set the scene', the next chapter, the first of four discussing this project's empirical work, asks *why* individuals are blogging about cycling-related transport policy in the first place.

Chapter 5: Blogging in Response to Expert Systems, Blogging as Individualisation

The purpose of this chapter is to explore why individuals blog about cycling-related transport policy; what are their motivations, goals and purposes? Reflective of the two overarching answers to those questions, the chapter is split conceptually into two parts: 1) expert systems 2) the individual, or self.

'Not very many aspects of [...] everyday life [...] are so highly endowed with expert systems and expert knowledge as the field of transportation' (Beckmann, 2001a: 600), and in the first part of this chapter blogging is shown to be a response to government, media and civil society organisations as three such expert systems on which the public must, and yet cannot, rely. The second reason for blogging is more biographical and supportive of the point that in late modernity, individuals are increasingly tasked with making more risk-related decisions for themselves.

'A heightened awareness that mastery is impossible' underlies the reflexive modernisation and risk society theses, on which this and the subsequent discussion chapters draw (Latour, 2003: 36; Beck, 1992; Giddens, 1991a; see section 2.2). Such awareness corresponds to public distrust in expert systems, which are themselves dependent on the public's trust. Within this context, 'old certainties, distinctions and dichotomies' are said to be 'fading away', whilst 'new rules' emerge and take their place (Beck et al, 2003: 3). The goal, Beck and colleagues (2003: 3) argue, is 'to decipher the new rules of the social game even as they are coming into existence'; 'the task of social science is to grasp them, describe them, understand them and explain them'. That I attempt to do, beginning with this discussion chapter and across the subsequent three. How is 'the game' of cycling-related transport policy changing in late modernity? Why blog about it? Does blogging make a difference? What are these so-called new rules?

Whilst it is too early at this stage to make any claims about 'new rules', the evidence presented in this chapter does reflect some of the underlying conditions necessary for them to emerge - namely, the old ones are thought not to be working. Expert systems become 'part of the problem they are supposed to solve' (Beck, 2006: 338); 'institutionalized answers seem progressively less suited to meet the challenges at hand' (Beck et al, 2003: 8). Within this framework, the first three sections of this chapter take each of the three expert systems in turn, before in the final section discussing blogging in terms of the reflexive self.

5.1 Blogging in Response to the State as an Expert System

It will be recalled from sections 3.1 and 4.1 that there is an apparent potential for 'issues' or problematic effects to arise from predominant versus emerging patterns of transport behaviour and policy development. Personal experience engaging with the state on these matters becomes a reason for some to blog about them, as this section goes on to discuss.

Engagement with the state occurs in different ways, with Isin (2009: 380; see section 2.2) distinguishing between acts and actions of citizenship. The former, he suggests, 'enact the unexpected and unpredictable' and hence make a difference, whilst the latter are prescribed, routinised and instituted, and *may* make a difference, although it is 'not inherent in them' (Isin, 2009: 380). Voting, taxpaying, writing to elected representatives, participating in public meetings, consultations, demonstrations and civil society organisations are all examples of *instituted citizenship*, or as Coleman (2005: 274) suggests, 'state-citizen relations', commonly characterised by and limited to the 'impersonal communication of demands and complaints'. The 'public's default position', Coleman (2005: 274) argues, has become to opt out of these relations and not participate, reinforcing Giddens' (1991a) concern that bad experiences with expert systems may result in public disengagement altogether.

The accounts presented in this section support the suggestion that interaction with the state, as mediated by the actions it institutes, tends indeed to be disappointing. Rather than opt out of relations however, here it is shown that some are actually motivated by such bad experiences to engage with the state in *uninstituted* ways. To give one example, after months of routine but unreciprocated attempts to interact with the city official responsible for cycling in Paris, campaigners placed a mock newspaper advertisement: 'Desperately seeking person responsible for cycling at the City of Paris', which did elicit a response. 'They were crazy the day we published that [...] they called us 'rahhh rah rah rahhh [...] how can you print that in the paper?' (Paris campaigner Peter). The point here is that in order to claim rights and be represented by the state, citizens need to be heard,¹ and in order to be heard, citizens need to make noise, but cannot rely on state-instituted citizenship to do so:

¹ See for example the blog At War With the Motorist (n.d.): 'our aim is in part to try to make our own little voices occasionally heard [...] to add to the many little people who are trying to tell politicians and planners that people want an *alternative* to roads and cars, not more of the same mess that we have now.'

as much as you'd like government to work by sitting down and making reasoned decisions [...] it's not how government works, you get government to do things by being a bloody pain in the arse basically and making as much noise as you can (London campaigner Rosemary)

This first section suggests that some blog as an *uninstituted act of citizenship* in order to 1) circumvent 2) enhance or 3) critique state-instituted citizenship, which is understood to be ineffective and unreliable. The section is split into three parts along those lines. In contrast to existing framings (see section 2.2) of transport or cycling citizenship as enacted via physical movement, the evidence in this section demonstrates that it may also be enacted whilst one is physically immobile.

Blogging to Circumvent State-Instituted Citizenship

For some, blogging is a means of simultaneously engaging with and *circumventing* the state. It satiates the desire to express one's views about transport (regardless whether anyone asked for them), whilst at the same time avoiding all-to-often disappointing state-instituted encounters, such as public consultations:

they show us their planned cycling facilities, we say we don't like them, they make them anyway and all is well because like that, they did a consultation, and afterwards when we're not happy, they say 'ahh, you are never happy', we are always in this battle (Paris campaigner Pascal)

these [consultation] meetings are only for the [city] to show what they have planned, what they are about to start constructing, the design is already made and it's the last chance for the [cycling] associations to say what they have to say [...] I'm beginning to think that it [might] only be a way for the city to [claim] that they are open and lead responsible discussions with the users, because in reality even with our input they sometimes seem to remain totally incompetent (Paris campaigner Patrice)²

TfL, as much as they say they consult with people, they just do it and everyone's like 'I can't believe they've done that' [...] TfL just scrapped all of what everyone said and did their own thing anyway³ so it was a bit of a slap in the face [...] a real moment where you realise 'yeah, we really have no say in government' because if [...] we can literally not influence despite a huge collective effort, petitions, etcetera, then we really have absolutely no power whatsoever [...] what I'd like to see is [...] the sort

² In contrast to Pascal and Patrice, and illustrative of just how differently the same situation or process may be understood by different actors, city official André spoke of 'much consultation and closeness' between city officials and campaigners.

³ For the context of Andrew's comment, see the following posts by blogger Williams: 'Blackfriars - a timeline of everything you need to know' (n.d.); 'Why is there no formal response yet [...]?' (2011b); 'Five days to respond to insane new layout from TfL' (2011g).

of important people that are making these decisions [...] getting involved with a bit more two-way conversation and I'd like to think that the blog can reach out to those people through being a blog (London blogger Andrew)

Disillusionment with instituted processes - consultations and petitions - evidently underlies one of the goals of Andrew's blog:⁴ to simultaneously bypass *and* influence one-way processes so that they become more 'two-way'. Indeed Rajé (2007: 64), in her work on the 'lived experience of transport', refers to consultations as 'one-way streets', whereby states inform citizens of what 'has already been decided', concluding that a 'major consultation gap' exists between users and planners of transport systems.

Another 'traditional site of citizenship contestation' (Isin, 2009: 371) is one-to-one communication with elected or other officials in order to express one's views and have them heard and represented. The perceived futility of this approach was described by London campaigner Iris, who, having witnessed the lengths her peers go through only to be ignored, stated:

they take note of every bollard and every traffic light and every one-way system and they write these immaculate reports and send them off to Transport for London or whoever is trying to get a road scheme going and they take no notice whatsoever, not a blind bit of notice, they hardly even acknowledge [...] in a way we haven't made enough impact, I mean going slowly and politely and writing endless letters which get ignored

For some, experiences like the one Iris describes become a reason to blog. Londoner Daniel, for example, whose 'goal would be a change in national government policy' or 'the policy of the Westminster government' suspects he is not the only blogger to have 'just got fed up with writing the letters to MPs and so on and getting nowhere and decided that [they have] more impact writing a blog'.

Blogging to Enhance State-Instituted Citizenship

For some, blogging is used to *enhance* state-instituted citizenship. That is, rather than circumvent or work *around* it, bloggers make state-instituted citizenship work *for* them. Take for example community boards in New York (see section 4.1), whose members are tasked with acting in the best interests of local residents. According to blogger Brad, community boards underrepresent those who do not drive and overrepresent those who do, because their members as demographically 'older', 'whiter', 'more affluent' and with 'car ownership rates […] probably through

⁴ For another blogger's account of the consultation process as 'a farce and an insult' see Arditti (2013c).

the roof compared to the norm in the city'. His suggestion is that community board members may not actually serve those they purport to represent, and that blogging becomes a means of strategically shifting that imbalance by encouraging readers to attend community board meetings, make noise, be heard and accounted for. Brad's below reference to not 'overthrow[ing] anything' suggests that the goal of the blog is to *work the system*, or to work *with* it, but not *around* or *against* it; the blog is used to enhance, rather than circumvent state-instituted citizenship:

we'll tell people 'here's a public meeting and if you go to it you may shape the outcome', so we'll inject ourselves into that [...] show that there's an appetite for this kind of stuff, so it wasn't really in the context of trying to overthrow anything, it was just like 'here we are, these are real people, we really are a mainstream voice in this community so don't dismiss what the needs are' [...] it only takes a few people who get these issues to join a board and start talking to other board members and then you start to see votes going the other way

Indeed *voting* is another form of state-instituted citizenship. Beyond community boards, in the wider context of the state and its elections, minority interests, those perceived to be minority interests (such as cycling with an approximate 1-3% modal share in each of the three cities, see section 4.1) and/or those perceived to endanger the interests of the majority, may struggle to obtain political representation:

[cycling] is just not an election-winning campaign message so [politicians] have got to appear that they're not against the motorist and I think if you stand yourself out as against the motorist you don't get voted-in, so unfortunately it's difficult for cycling to permeate politics⁵ (London blogger Andrew)

Blogging is one way of dealing with this. New Yorker Mike and Londoner James, for example, both see their blogs as means of improving political representation:

I have this strategy for dealing with the national legislation [...] if you can get bloggers in every congressional district getting 50 people out to talk to [...] each congressman, that's a mechanism to organise the whole country (Mike)

if more people understood that cramming as much motor traffic into central London as you possibly can isn't actually going to make anybody's lives any better, then they might not vote for Boris Johnson again (James)

⁵ Andrew's comment somewhat contradicts the discussion in section 4.1 on cycling having become politically acceptable. Although there is of course an important distinction between being 'against the motorist' and 'for cycling'.

A final example of blogs being used to enhance state-instituted citizenship is *protest*. The right to peaceful protest is fundamental to democracy, and yet the barriers to organising it were repeatedly cited by this project's participants. Moreover, there is the issue of cycling en masse being *equated* with protest, even if those individuals are not protesting per se. According to campaigner Peter, in order to be 'authorised' to cycle en masse in Paris, someone is required to register 'the event' with the city, including its 'demands' and pre-set route. This poses several difficulties, not least who should register if no one is in charge, where to cycle if the idea is to take things as they come and moreover, that cycling cannot be 'social' without being instituted (see section 4.1 on annual temporary road closures) or demanding something precise:

'what are you demonstrating for? why?' and it's always the same question, and sometimes it's difficult to say, just to say, 'we are here and we want to exist in the public sphere' (Peter)

Although blogging cannot surmount all of those difficulties, it can *enhance* protest (or that which is understood to be protest) by promoting it, connecting individuals, helping them to organise, strategise and articulate particulars (e.g. who will register, where will we go, why are we doing 'it'?) (see also section 7.3 on cycle campaigning in London having become more demanding because of blogging). Enhancing protest therefore underpins some blogging, as evidenced by London blogger Matthew who described a particular protest⁶ in London as:

a physical manifestation of anger [...] to some extent orchestrated via blogs and also people coming together via blogs so that suddenly we used this modern tool to get people on the street which is going right back to the classical forum, the reason we live in cities

Blogging to Critique State-Instituted Citizenship

For some, blogging is a means of *critiquing* instituted citizenship in an attempt to make the state more accountable and transparent. That is, where state-instituted citizenship is understood to be ineffective or undemocratic, blogs expose it. One such example expands the preceding discussion on protest, with participants recounting their understandings of the state jeopardising (even 'criminalising' as Claire suggests) their right to peaceful protest:

transport and security is decided in Paris [...] [by] the Préfet de Police, which is the state, and the state for a long time has not been very keen on bike movements, it's very difficult to organise something [...] at the beginning they will break the demonstration, they will do it for sure (Paris campaigner Luc)

⁶ For the context of the protest Matthew describes see blogger Williams' (2011c) post: 'Blackfriars. How do we make people realise this is about improving things for drivers and pedestrians, not just for cycling?'.

there was an interesting period of time in New York City where bicycling became criminalised in the sense that it was attached to political protest (New York campaigner Claire)

cops [...] were suddenly knocking us off our bikes and writing tickets and using all these tactics [...] I mean, the cops by no means *liked* Critical Mass [see section 4.3] [before] but they definitely didn't see it as an event that needed to shut down, and that all had to do with police [...] lumping Critical Mass into this... [...] post-9-11-domestic-terrorism 'I'm the former police chief of New York and I know what to do'⁷ (New York blogger Martin)

For Martin, these events became a reason to start blogging:

we're getting ticketed and attacked and arrested and I felt that I wanted to write about it, specifically about that [...] so [my decision to start blogging] was politically-motivated

Whereas the above comments point to cycling and/or protest as criminalised, the below comments suggest driving that injures or kills cyclists is *not* criminalised.⁸ Relating to this, another form of state-instituted citizenship - the right to request detailed information about those crashes, as mandated by open data or Freedom of Information legislation - is understood to be violated:

a law [...] compelled the cops to put crash information online and they did it in a really backwards way [...] not best practice open data at all [...] and another law was passed [...] that should compel them to put this info out in a more useful way, but in the end you just have to sue them or else they won't do it (New York blogger Brad)

with most of these crashes we don't have that much information [...] so if you take [...] an isolated instance, you would probably say 'okay, the police report is probably right, we have no reason to think it isn't, probably it was [...] just bad luck, a tragedy on the streets [...]' but if [it's happened] ten times in a row and each time the police say 'we don't think there was anything criminal happening', you start to say 'sure, for any given one maybe there wasn't, but the last ten in a *row*? does that seem plausible?' or 'why was this charge never brought?', we don't have the ability to say 'why wasn't it brought in this instance?' because we don't have access to that evidence (New York blogger Nick)

As Nick suggests, there is interest in critically engaging with these issues, asking questions, digging deeper, holding individuals and the state accountable for transport-related risks. The

⁷ See 'Video of Cop Assaulting Cyclist at Critical Mass Ride' (Del Signore, 2008).

⁸ See stories such as '\$250 Fine for Motorist Accused of Deliberately Striking Cyclist' (Aaron, 2014) that form part of Streetsblog's (n.d./2)'The Weekly Carnage', a weekly 'round-up of motor vehicle violence across the five boroughs', including the number of pedestrians and cyclists killed and injured, as well as the number of drivers officially charged.

perceived inability to do so however because a lack of evidence and transparency underpins some blogging:

a lot of what [the blog is] saying is 'why isn't there information?' (New York blogger Nick)

one of [the] original goals [...] was that [the blog] would function as a watchdog for the DOT, which previously was an agency that was really not very accountable (New York blogger Adam)

Section Summary: Blogging in Response to the State as an Expert System

This section demonstrates the public's lack of confidence in the state's management of transport and in the types of citizenship it institutes; indeed, 'a feeling of disconnection and distrust between the governed and the governors and a perception that voting and other forms of participation do not influence [...] policy-making' (Coleman and Wright, 2008: 1). For some, this becomes a reason to blog critically about cycling-related transport policy; blogging becomes an uninstituted act of citizenship, a subpolitical attempt to claim rights, make noise and be heard and represented by the state. We witness 'the rise of reflexive and affective, rather than simply obligatory and instrumental, constructions of identity and citizenship' (Coleman, 2005: 273). Moreover, in contrast to existing framings (see section 2.2) of *transport* or *cycling citizenship* as enacted via transport itself, here cycling citizenship is shown to be enacted whilst one is *physically* immobile, though mobile in other ways. The next section goes on to discuss motivations for blogging in relation to instituted media.

5.2 Blogging in Response to Instituted Media as an Expert System

Mass, mainstream, broadcast or other instituted media representations of cycling vary on spectrums of positive-negative and dangerous-safe, as outlined in section 4.2. This section suggests that the perceived unreliability of such media to expertly communicate information about cycling and other transport is a reason for some (particularly in New York), to blog. In part this is a matter of *quantity*, or amount (lack) of coverage:

you couldn't beg a major news outlet to cover transportation at all, there was very much this idea that New York's a big city, it's got a lot of cars, that's not news [...] they don't even understand that there's a topic area out there (New York blogger Mike)

I was always slightly frustrated that there wasn't enough cycling coverage [...] I very rarely read or see anything interesting about cycling in, say, the national press [...] editors who were non-cyclists were thinking 'what's the interest? what can you talk about?' (London journalist Paul)

Quality of coverage is however an even greater concern and the focus of this section, which is organised into two parts. The first considers blogging as a response to *uncritical* media coverage (hence blogging to be critical). The second considers blogging as a response to the (other) *institutional limitations* of media as an expert system (hence blogging to overcome them). Most broadly it could be said that the *prospect of improving* the mediation of information about transport policy motivates some to blog:

my focus from almost the beginning of my blog has been not just what *physical* things can we do to make the city safer and better, but the *messaging* behind it, how does the media interpret it [...] I take a pretty sharp eye, focus on media treatment of these issues (New York blogger Darren)

Blogging in Response to Uncritical Media (Blogging to be Critical)

For some, blogging is a response to media coverage that is perceived to be *uncritical*. That is, instituted sources are not always trusted to ask critical questions, nor to be as objective, fair and balanced as they purport, prompting some individuals to blog as a means of providing counter-coverage. Take for example blogger Mike, who was not the only New Yorker to criticise the practice of asking and broadcasting drivers' opinions about re-engineering city streets to better accommodate cycling.⁹ His suggestion is that such tactics not only perpetuate the status quo driving as normal, cycling as alternative/other - but they also gamble with people's trust. That is, such reporting normalises the risks posed by driving, ¹⁰ and hence perceptions of cycling as risky or to be feared, in the minds of a public reliant on, yet not always aware of the fallibility in, media to expertly communicate information about risk, and is therefore irresponsible:

the more I learn about traditional newspapers, the less respect I have for them [...] they almost provide this veneer of journalism [...] it almost occupies peoples' minds and they feel like they're informed [but] if there was just nothing people wouldn't be deluded into thinking they're informed [...] when you interview cab drivers for their opinion on traffic engineering, which is what [the *New York Times*] does all the time, their view point is almost meaningless except for some sort of raw animal reaction to things, but they interview them as if they should really understand traffic flow and street engineering [...] and they are people who are many times advocating points of view that are deadly to other people and the *Times* prints it as if it was like 'well, the common man really seems to think

⁹ New York blogger Charles: 'we'd get 500 people to turn out for a car-free [...] rally and we'd go home, watch all the new stories and [...] it's like 'wait a second, we organised... we had 500 people here [...] and you just ran up to some guy in a car and were like 'what do you think of this?"

¹⁰ In contrast see Streetsblog's '(n.d./2) The Weekly Carnage', which aims to draw attention 'to the scope of the problem of the death and destruction caused by automobile' and 'hopefully chip away at public apathy about automobile-related death and destruction'.

this' and you're just like... [...] 'you barely covered this topic and you're doing this weird 'here's an interesting quirky anecdote about a cabbie sort of thing' and you're like 'really? that's what you're covering?'

Despite his distrust of journalism, Mike's references to engineering suggest that he is not dismissive of all expert knowledge (perhaps because he is less aware of its fallibility). Perceived unreliability is therefore shown to be more nuanced than has been discussed thus far. Mike does not treat apparent non-experts ('the common man') equally either, with cab drivers admonished for giving their opinion on the same matters that bloggers (who may be cab drivers!) do all the time. Moreover, Mike's reference to 'raw animal reaction' alludes to the role of media in generating controversy and informing perceptions about risk (Lupton, 2006; see section 4.2). An example of this is the portrayal of cyclists and cycling in New York as 'elite'. According to blogger Nick, 'one of the [media] narratives that was both false and particularly destructive, around the time of the city's official crackdown on cycling in 2011 (see summary of section 4.1), was that cyclists are an 'elite population' stemming from the city's wealthier neighbourhoods (recall section 4.2 on constructing aspirational representations of cycling and cycling offering a 'certain bourgeois distinction', Steinbach et 2011: 1130). His point was that not only are such claims 'statistically [un]true and backwards in many ways', but that in this case, they actually endangered cyclists by pressuring the city to back down from plans it had to invest. Likewise, New York blogger Charles spoke of the public outrage emanating from reports of cyclists being privileged over the majority of road users:

bicycling was getting beat up in the press like crazy [...] [there] was this false report by the *Post* that during our three feet of snow [...] [the city] ploughed the bike lanes first, where people in Queens and Brooklyn didn't have their roads ploughed for a week, so of course, you know, the fact that this ridiculous report came out [...] people were getting angry [...] the newspapers [...] get things wrong all the time

In response to situations such as these, some blog. New Yorker Darren, for example, seeks to counteract the 'ask a cabbie' technique, or what he referred to in Rosen's (2010) terms as 'the view from nowhere':

'This side says the street is going to be dangerous with a bike lane, this side says it's worked elsewhere, which one is right? We don't know.' Well no actually, you could answer this question

For New Yorker Adam, blogging is a means of counteracting the car-centric bias inherent in other sources. He argued that whilst it may be true these blogs only reach those with already-likeminded views (and not those they seek to 'convert', see sections 5.4 and 8.2), the more notable matter is that they are

also providing this counterpoint to mainstream media that has also been to some extent preaching to the choir for a good 75 years¹¹, but in a way that is totally unacknowledged [...] you know, fish don't notice water, so an automobile-oriented lifestyle is just how Americans live and we don't even notice it and in a way, that's what [the blog] was meant to be, a kind of counterpoint to that, to point out these absurdities [...] so there is a preaching to the choir aspect of [it], but it's also trying to show that to some extent the rest of the world is also preaching to the choir in this automobile-oriented way that we don't even notice

Likewise, just because the message of London blogger James or his peers' blogs is 'very different to what the newspapers would preach', does not mean newspapers are innocent of preaching to the converted. Echoing Adam's desire to 'point out these absurdities', one of the influential factors in James' decision to start blogging was another blog, the satirical approach of which mocks the 'local newspaper's attitude to cycling'.

Blogging to Overcome Media's Institutional Limitations

Some blog in order to take advantage of the medium's affordances, which are understood in relation to the limitations of instituted media. One of the ways participants spoke of those limitations was in terms of *resources*, and not trusting that the resources necessary to critically report on transport would be available:

you can't develop arguments, I mean no paper will publish a coherent multi-paragraph argument for cycling¹² (London blogger Daniel)

a newspaper has this much space [indicating with hands], even online they have a limit to how many words they're going to write (New York blogger Darren)

even now when [the *New York Times does*] pay attention, it's like 'all right, you go write about that' ¹³ and some reporter goes and shows up at some situation, they educate themselves for a day, they write an article and then they go away and do something else (New York blogger Mike)

Resource limitations are in other words understood to affect the *quantity* and *quality* of coverage, and hence the capacity to hold city officials and government agencies accountable. New Yorker

¹¹ For example, the weekend papers have 'always had' car reviews, as London journalist Paul noted.

¹² Although recall Daniel's and others' comments in section 4.2, which suggest that there has been a favourable shift in media coverage.

¹³ Indeed, when asked what motivated him to start blogging, Londoner Matthew replied: 'I really enjoy writing but I don't want to be a journalist where I'm told 'go and write about council tax' or 'go and write about architecture', I want to write about what I want to write about'.

Nick, for example, understands his ability - as a blogger - to ask questions critical of the NYPD (their handling of crashes that result in the injury or death of cyclists), *in relation to* the limitations of instituted media:

that is not something the *Daily News*, which actually is a paper that really does cover traffic crashes - tabloids like that stuff - but they don't have the capacity to say 'what is the legal underpinnings of this?', they're writing a two paragraph story saying 'there was a crash in this neighbourhood and the family is very sad'

Another way participants referred to the limitations of media was in terms of *vested institutional interests*, or not being able to rely on claims of objectivity. Such interests include the 'need to sell' (e.g. printed editions, advertising),¹⁴ the tactics employed to do so (e.g. presenting information in a way that generates controversy,¹⁵) and underlying political leanings (see section 4.2). As such, one has to keep in mind

who the editor is at the paper at a particular time, what their allegiances are to a particular politician [...] so if the newspaper has got a good relationship with th[e] mayor, then things may be different from if they don't, and you know, you can see that [in their coverage] (London city official Samantha)

In response to situations such as these, and because blogging is understood to counter them, some blog. New Yorker Darren, for example, recognises that because he has less to lose than 'bigger media', he can critically analyse, frame and re-frame situations in ways they can or do not (recall also section 3.1 and common characteristics of blogging in relation to instituted media):

it depends how you frame it, part of the Prospect Park bike lane ¹⁶, for example, the bigger media would always frame it as 'cycling versus cars' and I had the freedom on my blog to say 'look, here's what it's really about, it's not just cyclists versus cars, it's pedestrians as well' [...] I have the freedom to say 'wait a minute, let's look and see who's right', and that doesn't mean you rubber stamp everything just because it's got a bike lane on it, it means you say 'wait a minute, actually, there's an answer to this'

For Chris in London and Martin in New York meanwhile, blogging offers an alternative to instituted and expert knowledge. That is, it enables bloggers not only to express *their* claims to knowledge and have those claims legitimised by others, but also, to help them and others become *more*

¹⁴ See Horton (2007: 146) on the 'high proportion of [...] advertisers [who] belong to the system of automobility, on whose revenues newspapers depend'.

¹⁵ Also, New York blogger Charles: 'they seem to purposefully report stories [on cycling] so that [...] they'll create a controversy so that they can keep selling newspapers'.

¹⁶ This particular bike lane in Brooklyn became 'one of the most closely watched controversies over a signature policy of the Bloomberg administration' as mentioned in section 4.1 (Grynbaum, 2011)

independent and less reliant on information communicated by media whose credibility and authority are rooted in institutionalisation:

the blogs [...] give people [...] a cheap, easily accessible way to express themselves [...] I think what it means is that where[as] [20 years ago] you'd try to get the job with *The Guardian* to become the person who's authoritative on it, now you can become authoritative on it because of people reading it on your blog (Chris)

[cyclists] are outside, physically on the day to day, see the issues and the problems of transportation, so bikers see it and live it, so blogging for them, they can really come back and translate it better [...] that's the real transformative thing [...] and people get their news now more from blogs and social networks [...] blogs definitely speak to the bikers more than... maybe occasionally there's a [...] [broadcast] piece on it once in a while, but people don't want to wait any more [...] they want to debate all the time about biking (Martin)

Section Summary: Blogging in Response to Instituted Media as an Expert System

The notion that individuals may 'translate' experiential or practice-based knowledge (as Martin suggests above), via blogging, is discussed in section 5.4. For now, and to conclude this section, it is evident that some seek to take advantage of the blogging medium's affordances and critically communicate about cycling-related transport policy because instituted media sources cannot be, it is perceived, relied on to do so.

5.3 Blogging in Response to Civil Society as an Expert System

It will be recalled from section 4.3 that cycling's civil society is characteristically disparate, particularly in London. That disparity, this section argues, motivates some to blog, and to do so along three lines. Firstly, blogging is a response to understandings of advocacy not having demanded nor achieved enough for cycling (hence blogging to demand and achieve more). Secondly, blogging is a response to civil society organisations' perceived inflexibility regarding segregationism as a strategic preference (hence blogging as a movement spin-off) (see section 4.3). Thirdly, blogging is a response to the perceived exclusivity within cycling's civil society (hence blogging to be more inclusive or representative). These points are each the topic of this section's three parts.

Blogging in Response to Civil Society's Insufficient Demands or Achievements

For some, blogging is a response to understandings of cycling's civil society not having demanded nor achieved enough. Civil society organisations alone cannot, it is thought, be entrusted to do what is best for cycling. For example, in New York, blogger Mike referred to the advocacy establishment 'fighting the good fight and losing for decades', whilst in London where this is more of a concern to participants, blogger John claimed to know 'what the score is', 'what the level of achievement has really been', describing the period leading-up to the start of his blog as when:

the ideas were starting to formulate that cycle campaigning [...] hadn't actually achieved much in three decades and I started questioning it [...] I started thinking well, 'why aren't we more...' [...] 'why aren't we campaigning for [segregationism]?

As John suggests, achievement is linked to goals, demands and strategic preferences - what advocates seek to achieve and ask policy-makers for (e.g. segregated infrastructure, see section 4.3), and how they go about doing it (e.g. campaigns, protests, instituted or uninstituted actions). That some organisations 'you might have expected' (London blogger Daniel) to initiate protest are 'a little bit reluctant' to do so (London blogger James) is a source of distrust and frustration for some, as is the long-standing advocacy preference for integrated road conditions. In London this distrust and frustration are conveyed in the comments of bloggers who discredited establishment campaigners as complacent or content with the status quo; of taking a 'softly softly approach' (commenter Peter in Dunckley, 2013). Blogger John, for example, in no less than three ways effectively described advocates of integrationism as a different species: firstly as 'dinosaurs' (suggesting that their strategic preference is outdated and unfit for survival); secondly, as 'from a parallel universe' in the eyes of 'normal civilians' who would not agree that existing road conditions are 'perfectly safe'; and thirdly, by describing one particular group as 'essentially an organisation of enthusiasts that would think nothing of going across the Khyber Pass on a Brompton 177. Likewise, London blogger Matthew:

if someone said 'would you drive a segway¹⁸ down the Westway?¹⁹ [you'd say] 'are you crazy?' and yet we have cycle campaigners who say 'of course we should have the right to cycle along the Westway!', it's like 'are you completely mad?'

^{17 &#}x27;A brand [of bicycle] that is a byword in chic thanks to its pared-down technology' (Wood, 2009).

¹⁸ Users of the Segway Personal Transporter move by standing 'on a small platform supported 20cm off the ground by 2 parallel wheels', which they control with handlebars (Sawatzky et al, 2007).

^{19 &#}x27;The Westway, the ultimate symbol of how the urban motorway tore up our cities', is to be redesigned and fitted with segregated cycle tracks on a particular stretch where motor traffic 'has dropped 22 percent in the past decade' (GLA, 2013: 5 and 11).

In response to such understandings, and in an effort to make cycling advocacy more demanding and successful, some blog. As John and Matthew's comments suggest, this may entail applying pressure on advocates by publicly discrediting them for not doing *what is best for cycling* and thus putting the whole movement at risk (although see section 8.3 on how this tactic may backfire). Indeed John went on to argue that 'there needs to be a massive bite' in civil society organisations, whose perceived lack of reflexivity motivates him to blog:

they never seemed to question that what they might have been doing is wrong, so that's just kept me going [blogging]

Others suggested that blogging makes them and others *more independent and less reliant* on instituted advocacy (much in the same way it is thought to do with instituted media, see previous section). That is, although bloggers depend in part on peer review (see section 6.2) for their blogs to be legitimated and thus read, they are free of institutional limitations that dictate *what* can be demanded and *how* to go about achieving it. And therein lies part of the appeal:

it looks like [bloggers] will just carry on [organising] these protests anyway whether [the London Cycling Campaign] like it or not (London blogger James)

I can say things that Transportation Alternatives [see section 4.3] cannot say, they have to craft very carefully-worded press releases (New York blogger Darren)

Blogging in Response to the Inflexibility of Civil Society Organisations

How London's civil society organisations handle *dissent and debate* relating to integrationism and segregationism as two opposing strategic preferences (see section 4.3) is another reason for some to blog. The consequences of dissent within advocacy organisations or the directions it takes are, according to Whittier (2004), influenced by *organisational flexibility*. That is, more flexible organisations are predisposed to accommodating, absorbing or adapting to difference within their environment, whilst less flexible organisations that attempt to suppress it 'are more likely to spawn factions'²⁰ (Whittier, 2004: 535). Participants in this research recounted their experiences of the latter; of dissenting views (on segregationism) being silenced or otherwise not welcomed. One campaigner,²¹ for example, described how the topic of segregationism was suppressed within their organisation:

²⁰ According to Dunckley (2013), bloggers are sceptical about the possibility of achieving a 'united front' with the campaigning establishment based on their past experiences with it.

²¹ I have chosen not to use this participant's pseudonym in order to further protect their identity.

we came to be anti-segregationist, but it was a non-spoken position [...] it would even get to the stage where [we] would write a news story with the word segregation in it and [...] would have to take it out because, not necessarily because we were anti-segregation, but because there had been so many arguments about that word, and I think it was a bit of a fudge internally but it got to the stage where, rather than mention it, it was safer just not to discuss it and to concentrate on other policies

Referring to another organisation, London blogger Daniel observed that 'you never really see anything else [apart from their integrationist-stance] [...] it's a large organisation but you don't really see any conflicting point of view'. Daniel, along with fellow blogger John, recounted examples of (themselves and others) being 'kicked out' and 'shouted down' at meetings for expressing dissenting views²². Underlying such reactions John argued is 'a question of pride and ego, there are people that will defend to the death a wrong ideology'. Daniel likewise suggested that people who have 'made a career out of claiming they know what is good for cycling' are unlikely to accept 'heretical views':

the need [...] to construct networks of segregated cycle facilities [...] had always very much been a minority point of view in the British cycling world [...] if you suggested anything like that [you tended to be] told that your ideas were dangerous and would lead to cyclists loosing the right to use the road, it was always very difficult to argue that line²³

In response to situations such as these, blogging becomes a means for some segregationists to 'spin-off' from the predominantly integrationist advocacy establishment, to communicate alternative knowledge claims and to advocate segregationism as a strategic preference. London blogger Daniel described his own discovery of this phenomenon, which ultimately resulted in him becoming part of it:

I had not been aware that there were all these very high quality discussions going on, not in the traditional forums, not in the groups associated with the London Cycling Campaign or any of the other cycling organisations, but completely independently [...] and arguing very much the same

^{22 &#}x27;You couldn't get anywhere in any cycle group if you thought differently. I recall being told I was 'ill-informed', that cycle tracks 'were by idiots for idiots' and so on. When I went to cycle groups to talk about the need for cycle tracks there were always those who dominated the discussion and criticised cycle tracks. But always too I had people who came up afterwards and said that they agreed with cycle tracks, but said that were shouted down if they suggested them in meetings' (blog commenter paul gannon in Dunckley, 2013)

²³ As Daniel's use of the past tense suggests, times may have changed as indicated by the LCC's decision to canvass its members (see section 4.3 on 'Go Dutch'): 'the leadership of the [LCC] now seems to be willing to take on board this idea that you have to listen to the widest possible range of people interested in cycling rather than a small, dedicated coterie of cycle campaigners, which is what it used to be, policies used to seem to come from a small group of people [...] the fact that they held this vote is a very crucial step'. Similarly, fellow blogger Chris: 'LCC have had pressure put on them and I think that they're not reacting badly'.

[segregationist] line as I'd been arguing [...] I found that there were a lot of people on the Net generally - not in the cycling campaigns - just writing independently saying exactly the same thing

Through his discovery of the blogs and other 'high quality discussions', Daniel also became aware of and attended an event by the Cycling Embassy of Great Britain (see section 4.3), where those in attendance

all seemed to blog, be bloggers, they all seemed to have these blogs and so somebody said to me 'you should do a blog as well' [...] and I thought I'd write a few things and specialise [...] into cycling issues and particularly, the politics of cycling

In other words, Daniel - and evidently others - were prompted to start blogging by the perceived inflexibility of cycling's civil society organisations; the affordances of blogging as a means of debating and supporting dissenting views; and the realisation that they were not alone (this latter point is revisited in section 5.4):

do I spend [my] time in meetings [...] arguing [...] or do I write the blog which is [...] not quite so annoying in terms of arguing with people [...] [my blog] is mostly written to influence the cycle campaign community

Blogging in Response to Civil Society's Exclusivity or Lack of Representation

Some blog in response to the perceived *exclusivity* of the advocacy establishment, and in an effort to be more *inclusive or representative*. According to participants in London, those unable to rely on advocacy organisations to represent their views include: their members, city officials, bloggers and potential, new and experienced cyclists. Londoner George, for example, by virtue of his employment with the city, sensed that he could only ever be viewed as an outsider by cycling's civil society organisations:

I happen to work for [the city] but I saw myself working to deliver something for cyclists and non-cyclists in London, that was it, I didn't have a vested interest at all but they [a particular organisation] kind of branded me as part of [the city] and took a position, and that was it basically, to the point where discussions weren't very good

London bloggers Andrew, John and Matthew meanwhile argued that potential, new and experienced cyclists, some of whom are bloggers or members of advocacy organisations, risk being excluded or not represented:

it's often quite a protectionist group [...] it's almost like 'who are you with your blog, you outsider?' [...] a lot of new cyclists like myself [...] become very disillusioned to these groups because it almost feels like they do their own thing and you don't really get a say (Andrew)

cycle campaigners are spectacularly wonderful if they're speaking to the already-converted, utterly dreadful when they're speaking to the general public²⁴ (John)

it's a stressful period for those kind of organisations [...] people join a campaign [...] because they believe it represents their views [...] just like people pay money to join the Labour Party or the Conservative Party, and if those organisations don't represent the views of the people they seek to represent, they are in serious financial trouble²⁵ (Matthew)

In response to such understandings, some blog²⁶. John in London and Darren in New York, for example, blog in order to reach a wider audience, whilst Londoner Andrew aims for his blog to be more inclusive of others than advocacy organisations were of him (see also section 7.3 on the difference blogging has made to understandings of advocacy representation, as well as section 8.2 on the perceived inability of blogging to reach out to the wider public):

if you're just preaching to the small, right now, small group of people who are already biking to work and noticing how dangerous the streets are, you're not going to get a lot of people to relate to that (Darren)

I want to take this to the general public and say 'look, there is another way' (John)

[my blog is] much less preachy [...] very kind of non-judgemental and it's very much all-inclusive [...] so it's a much more open environment as opposed to perhaps some of the sub-chasms that exist within the cycling world [...] I'd like to see that the blog continues [...] to be a very open place that anyone can come and discover, and not feel that I'm talking down at them, they can ask any question they want and it'll be a place to get good advice and not preaching (Andrew)

²⁴ A similar criticism is made of bloggers in section 8.2.

²⁵ See dialogue amongst blogger Dunckley (2013) and his reader commenters Billy and simonstill. In response to Dunckley's post critical of a particular advocacy organisation, Billy states that if he were a member of it he 'would want to leave', to which simonstill replies that 'the last thing you should do is leave – like it or not these organisations continue to have a voice and they need to be changed from the inside'. See also section 6.2 on the importance of the interaction between bloggers and their reader commenters.

²⁶ See Dunckley (2013) on blogging being 'a far better method of achieving progress than small groups [of advocates] talking for a couple of hours behind closed doors', and usually dominated by 'whichever person can talk the longest and interrupt the most often'.

Section Summary: Blogging in Response to Civil Society as an Expert System

As with government and media, instituted advocacy faces something of its own crisis of legitimacy, in response to which, some blog. That is, blogging becomes a means for some individuals to take cycling advocacy into their own hands; to be more demanding or to interact more independently of the campaigning establishment on which they otherwise rely. In London, that translates into the emergence of alternative, informal advocacy networks as individual advocates with a preference for segregationism 'spin-off' from the 'integrationist' establishment, which is understood to be unable or unwilling to accommodate dissent.

5.4 Blogging as Individualisation

Answers to the question 'why blog?' have until now in this chapter been understood in relation to expert systems. This final section by contrast replaces the notion of system with self, or 'personal ego and personal life' (Beck, 1992: 135). Here the decision to blog is understood in terms of the individual; as 'a reflexive project of the self' (Giddens, 1991b: 5); the individual as the primary unit of social life, attempting to make their way amidst the risks, uncertainties and opportunities that confront them in late modernity (Beck and Beck-Gernsheim, 2001; Rainie and Wellman, 2012; see section 2.2).

Individualisation is said to be the result of the erosion, or gradual retreat and undermining of the basic institutions or 'ascriptive patterns of collective life' in first modernity (Beck et al, 2003: 6; see section 2.2). This includes not only, for example, social class and nuclear family, but also the state, science, mass media and other expert systems on which we all have come to rely. Indeed the 'failure of expert systems to manage risks' is said to result in individualisation by 'default' (Beck, 2006: 336). Heightened awareness of that failure means individuals have little choice but to distrust expert systems and fend for themselves instead, at which point they are bombarded by choices (and decisions) less or unavailable to previous generations.

Transport, for example, or at least its management as an abstract system, was once deemed largely external to people's lives. Now however, it and other such systems have private, biographical consequences, Beck (1992: 137) argues, as their expert representatives 'dump their contradictions and conflicts at the feet of the individual'. Put another way, 'the responsibility for mobility has become individualized', just as it has in other aspects of contemporary life (Freudendal-Pedersen, 2009: 6).

Individualisation is moreover achieved through *self-organisation* (see section 2.3). With the gradual erosion of first modernity's more centrally and hierarchically organised institutions, linear systems

and monopolies of professional knowledge, the individual subject in second modernity becomes 'a product of self-selected networks' (Beck et al, 2003: 25). That is, part of fending for oneself entails *interacting* with and *adapting* to one's environment in order to acquire knowledge; becoming the 'object of the choices and decisions of others' (Beck et al, 2003: 26).

Blogging, this section argues, is one manifestation of these processes. It is a means of organising oneself in relation to other selves in order to cope with transport as one of many demands in late modern life. With this framework in mind, the section is divided into four parts. Firstly, it is shown that some blog as a means of reflecting critically on transport and its risks, and mobilising those reflections into action. Secondly, some start to blog following the realisation they are not alone; others too are reflexive about mobility. Thirdly, to blog is for some to contribute to a pool of knowledge that it is hoped, will be used to convert some and arm others. Finally, blogging is an attempt to better one's life, city and the world.

Blogging as a Cognitive Response to Transport, Blogging as Reflexive Mobility

Firstly, some blog as a means of *reflecting critically* on their experiences with transport and *mobilising those reflections into action*, into a 'cognitive response' that may be shared with others (Beckmann, 2001b: 110). Whilst section 6.1 discusses the role of cognition in producing knowledge, here the point is that like modernity, mobility itself is now reflexive and blogging is one manifestation of that reflexivity. As Beckmann (2001b: 110) argues, *reflexive mobilities*²⁷ begin with some form of movement (and 'may lead' to criticism of automobility):

as I got into the bike lanes, what really began to speak to me as I [...] learned more about, for example, the imbalance in gender in cycling in New York City and also about really, the need for advocacy, when you get in the bike lanes, you realise pretty quickly you should be advocating for them [...] so that is then really what informed my decision to make the blog (New York blogger Sara)

when you get out there on the streets and you ride a lot, you just start to notice stuff and [...] I started to find that I had [...] longer opinions and more things to say than [...] would have been appropriate for just a comment [on someone else's blog], so I said 'well, I'll set this up' (New York blogger Darren)

Somewhere between physical movement, the realisation that one has something to say about physical movement and the act of actually saying it, emerges the decision to blog. Blogging becomes a means of critical reflection, of gathering and organising one's thoughts, of acquiring

²⁷ Reflexive mobilities contrast to 'nonreflexive', 'noncritical' and 'orthodox' responses to transport risk, which 'sustain the car-as-we-know-it', according to Beckmann (2001a: 604 and 605).

abstract or conceptual understandings of transport (in addition to the experiential knowledge acquired via physical mobility, as alluded to in the comments above), of understanding one's mobile self in relation to the world, of constructing some sort of 'biographical narrative' (Giddens, 1991b: 58):

[blogging] is a way of digesting what I've been reading and learning about and getting my thoughts together by trying to explain them to someone else (London blogger James)

I've felt strongly about these issues for a decade and I've been well-educated and I know my stuff [...] but to stop and say 'okay, why do you actually hate traffic in the city, what really bothers you?', it's almost like I have to... it's almost like personal therapy,²⁸ like what do you *really...* and to figure out how to articulate it because [...] this language that I'm using now [...] I don't really think has been used before, but it's very easy to experience it and know it in your heart, it's very hard to be able to articulate it, and it took me a lot of work (New York blogger Mike)

Underlying the above comments is a desire not only to be reflective and to express oneself (to oneself), but also, not to be alone; to mobilise or share those reflections and expressions with others; to have one's cognitive response to mobility heard and legitimised; to connect and communicate with other 'reflexive transport-users' (Beckmann, 2001b: 110) and *their* respective, subjective knowledge; to effectively develop networks 'that enable self-expression and reinforce it through public recognition [where] both the self and the public develop in tandem' (Beck et al, 2003: 26; see section 6.1 on the role of communication in producing knowledge). The *inability* to tap into such networks prompted Londoners Matthew and Andrew to blog:

I couldn't find anything online, which is my primary domain for information, which reflected my own experience of cycling in London [...] so I started writing about my [...] own experiences (Matthew)

there wasn't really a lot of information out there for the more everyday cyclist [...] so I really wanted to start something about that because it was an experience I was going through myself (Andrew)

²⁸ See Giddens (1991b: 180) on personal therapy as a 'phenomenon of modernity's reflexivity', 'a methodology of life-planning'. Also, London blogger John: "the first thing [...] people will experience when they start a blog is just how cathartic it is [...] how much pent-up anger and stuff that they want to share suddenly comes out."

Blogging Because One is Not Alone, Blogging to be Social

Some start to blog following the realisation that they are *not alone*²⁹; others too are reflexive about mobility. That is, unlike Matthew and Andrew (just above) who began blogging because they could not find information reflective of their daily experiences with transport, other participants started blogging precisely because they found others' critical reflections resembled their own. It will be recalled from the previous section, for example, that Londoner Daniel's 'discovery' of blogs prompted him to start one of his own. Indeed, the first one he read - Freewheeler's Crap Cycling and Walking in Waltham Forest (n.d.; see also Appendix A) - inspired 'a number of people at least in part who are blogging' (London blogger Chris); inspired others to produce 'Freewheeler-influenced postings, Freewheeler-style posts' (London blogger James). This was because, as James and fellow blogger Matthew explained, Freewheeler actually said what everyone else was thinking but dared not say (and therefore no one knew anyone else felt the same way): cycling's civil society is not achieving enough; it is failing to mitigate transport risks (see previous section):

the basis for everything that Freewheeler did is ask 'what has 20-30 years of our current approach to cycle advocacy achieved?' it's a pretty huge question [...] Freewheeler went through this coming out process of 'how I became a segregationist' and I think 'coming out' is really a key there, and gave recourse, gave comfort to other people who felt the same way to be able to express that they also thought this [...] it's allowing people say 'actually, I also think this' (Matthew)

[Freewheeler] motivated a lot of people just by constantly blogging, [...] making fun of the crap cycling [...] occasionally it would be the 'really make you angry post', he does a bit of investigation and explains who is responsible for it all, it was the combination of those things that made me think it was important enough to start [...] writing about it as well [...] a lot of people were [influenced by Freewheeler] [...] a lot of people weren't happy with [the status quo of cycling and the campaign establishment] but weren't entirely sure what should be done differently, why it was going so badly and didn't realise anybody else felt the same, so it was sort of a big coming out thing, everyone realised there were other people who feel this way [...] people wouldn't have found each other without Freewheeler motivating everyone [...] allowing everyone to express themselves 'oh look there are all these other people who feel the same' (James)

On the other side of this coin are comments from bloggers conscious of their role in connecting individuals, inspiring others' reflexive mobilities and reinforcing the networks that hold cycling

²⁹ Despite its relative lack of blogs, Paris does have an online cycling forum (Vélotaf, n.d.) worth noting here for its effect on campaigner Patrice: 'when I found [the] forum [...] it was really nice to suddenly be able to talk about my own experience and also give advice to others as if I had some kind of knowledge I conveyed [...] suddenly you have the impression of existing as a cyclist and meeting a community where cycling matters, whereas otherwise you can feel very isolated [...] we all share the same ideas about the same problems on our daily rides so that puts us in the same bag anyway, but it was really a big relief to be able to talk and to post things [...] before when I was by myself I didn't know how to shout my anger'.

together (Beckmann, 2001b). That self-awareness of making a difference to others is in itself motivation for some to blog:

when [the blog] came around I think one of the most important things [...] was that it was this beacon to people out there, that they weren't crazy, that they weren't by themselves, that even though nobody in their neighbourhood or that they met with thought these things, that there were other people out there [...] we were able to activate this kind of latent energy [...] [the blog] managed to reach out to people and empower them because before, to stand up in the United States and say 'this whole car thing is kinda wrong', it's like standing up and saying you're a communist [...] people are like 'ohhh, it *can* be better, there *are* other people out there, there *are* groups of us', there's this expectation and you see that catalysing those people who are latent, I think that is really a big part of what [we do] (New York blogger Mike)

in the mid-90s when I was volunteering for Transportation Alternatives, you were in a room with 10-12 other people licking stamps and envelopes and everything else [...] and you kinda still felt like, even though you were around these people [...] the word just isn't out there, nobody knows [...] and now... [...] you've got this younger group of people who are just so active on social media and they don't know how tough it used to be [...] you just want to be that old angry man, 'you guys don't know how hard it was it was to even just organise a meeting or get people to a community board' [see section 4.1], now you can get people to flood community boards by just putting up a post [...] we've now finally got this advantage (New York blogger Charles)

Blogging to Produce Knowledge as a Strategic Resource

Some blog in order to contribute to a pool of knowledge that it is hoped will be used to *convert* some and arm others. That is, blogging is understood as a means of producing and managing knowledge (for more discussion on which see Chapter 6) that may be used to raise awareness amongst potential new supporters and to reinforce the base of already-experienced ones. In the case of the former, bloggers spoke of the desire to enlighten, convert³⁰ and recruit others; to strengthen existing networks by enlarging them:

it's popularising ideas [...] there are all these interesting concepts, all these things that have happened and all these things going on that more people should know about (Londoner James)

I want as many people as possible to realise that [cycling] is this really easy simple thing and to deconstruct the prevalent image that we have of cycling in the UK (Londoner Matthew)

³⁰ London's transport commission Andrew Gilligan: 'when you cycle, you become like a Jehovah's Witness and you want other people to share the one true faith' (Gilligan in Roberts, 2013)

part of the way I'm helping is figuring out ways to communicate this so people can get it [...] [there] are all sorts of things that most people never thought of and don't understand [...] you can't really expect people to want to get rid of cars if they don't know what the problems are (New Yorker Mike)

the goal of [the blog] is to show what is possible and to remind people that the way the streets are laid out was not fixed from time immemorial (New Yorker Nick)

Alternatively, bloggers are also motivated by the prospect of arming those already prepared to fight for the cause. Rather than worry that blogging may not be reaching or converting the masses (one of its perceived limitations, see section 8.2), some seek to reinforce already-existing networks; to get 'everyone banded together' (Londoner Andrew) who already shares this 'very narrow interest' (New Yorker Charles):

a preaching to the converted thing, that's always been the aim of it, [...] it's not supposed to be about making a hard core Top Gear style 'capital M' Motorist change their minds, because I know that's not going happen on a little blog but it's arming more people with the arguments, arming the choir with the facts and the arguments that they need (Londoner James)

if you're talking to people who are [already] interested and they [...] write an email to somebody or [...] circulate something to their friends... (Londoner Chris)

And whilst the readership of these blogs may be small in number compared to the populations of these cities or the number of views 'a guy that slips on a banana peel' gets on YouTube (New York blogger Charles), some are motivated by the 'tremendous value in writing for the base' (New York blogger Brad):

you don't need to have a crowd of 500,000 in the streets, what you need is, even if it's relatively small, a very active, committed group of people [...] who will come to the meetings [...] who are talking to their friends about this stuff and are paying attention and strategically donating money and are pressing their elected officials [...] that doesn't require many many thousands of people, it does require a base and that's what I think is very effective about Streetsblog (New York city official Nathan)

on any one issue, there is a very very small number of people who are really engaged [...] and when you're reaching that 1% who are engaged, then that's enormously influential (New York blogger Mike)

In both cases - to convert and to arm - the prospect of what individuals may do with knowledge, or how they may react to one's blogging, is a motivating factor. The aim in both cases is to make a difference to individual cognitive responses to mobility, communication about them and the subsequent likelihood of new properties emerging (see section 6.2 for more discussion on these processes). Blogging is, in other words, a matter of strengthening the overall movement and networks of individuals holding it together, much in the same way as other resources or bodies of evidence do:

we're creating a body of evidence [...] we'll end up with is this body of work that is part anecdote, part fact, and a shed-load a load of photographs and mapping³¹ and whatever, so it's like 'all right, argue with this, if you dare' (London blogger John)

you want to have a way of recording [...] as much as anything else, 'this is happening, that is happening' (London blogger Chris)

I really want my blog to be a resource (New York blogger Martin)

essentially the whole goal was to create a library of work that people can use and further what's going on (New York blogger Charles)

over time you do Google searches on certain issues, probably 'congestion charging' is one of them or 'bike share' might be another, 'Janette Sadik-Khan' is probably another term, and all these Streetsblog stories pop up [...] we are constantly linking and being linked back to and that [...] gives the blog [...] incredible archival power (New York blogger Adam)

Blogging to Better One's Life, City and the World

Finally, blogging is an attempt to better one's life, city and even the world:

it's about creating [...] a better world and I find that at the very base level, enormously exciting (Londoner Matthew)

I started doing all of this just to make my own little world better, my own neighbourhood, all that stuff, I was really not thinking 'this will have some sort of global impact' (New Yorker Mike)

Ultimately, it should go without saying that underlying such visions is the notion of 'more people cycling more often' (London blogger Chris's goal). London blogger Andrew, for example, aims to help London become a 'great cycling city', whilst New York blogger Sara wants to 'encourage more women to give it a try'. Quality of life is moreover associated with safety, and New York bloggers Darren, Mike and Charles effectively referred to blogging in terms of individual risk management;

³¹ Visualising transport policy is one means by which to mobilise it, as discussed in section 6.3.

their attempt to personally mitigate the social and environmental risks of automobility (where others are understood to have failed):

I have a two and a half year old daughter [...] the issues about dangerous streets came into focus more sharply when I had to start pushing her across the street in a stroller [...] I want to stay in New York [...] and I'd like it to be as safe as possible (Darren)

if you go to most people and say 'what's wrong with the car?' they'll say 'well there's tailpipe emissions and global warming' and I'm like 'that's nothing, electric cars bother me 99% as much as other cars' and so the understanding that it affects the social dynamic of the streets that we live on and it affects your ability for your kids to walk to a playground (Mike)

I want a better world, I want a more bikeable, liveable city, I want more pedestrian safety, I want to be able to ride a bike in safety [...] it's much bigger than transportation, it's about your safety, it's about pollution, it's about ways to get around, it's about the quality of your life (Charles)

Section Summary: Blogging as Individualisation

The evidence in this section illustrates that, 'alienated from expert systems' and 'thrown back onto themselves' (Beck, 2006: 336), individuals are blogging for biographical reasons: to reflect critically on their experiences with transport; to communicate that cognition with others; and to organise themselves into networks that reinforce individual and collective interests and ultimately, it is hoped, make a difference. These motivations and actions, combined with the undermining of expert systems as the first three sections of this chapter discuss, have consequences for the production and mobilisation of *knowledge* - the subjects of the next chapter.

5.5 Chapter Conclusions: Blogging in Response to Expert Systems, Blogging as Individualisation

why does anyone start blogging about their experience in whatever they do? [...] there's [...] an anger element of experiencing a status quo and saying 'why isn't anyone challenging this? why isn't anyone doing something different about it?' and having to become a voice about something out of necessity (London blogger Matthew)

The evidence presented in this chapter suggests broadly two motivations or purposes underlying the decision to blog about cycling-related transport policy, based on a combination of exclusionary and inclusionary practices (Beck et al, 2003). Firstly, blogging is a response to the gradual undermining of three expert systems, on which the public must, yet cannot, rely. The second

reason is more biographical. That is, 'how ones lives becomes a biographical solution to systemic contradictions' (Bauman introducing Beck and Beck-Gernsheim, 2001: xvi), with individuals who are reflexive about transport taking advantage of (the mobility afforded by) blogging to organise themselves in relation to one another.

These bloggers join an emerging collectivity of actors 'united by an increasing vulnerability to risk' (Ekberg, 2007: 343); 'pushing for a solution in terms of restructuring mobility' (Rammler, 2008: 70); 'concerned with the risks of automobilisation' (Beckmann, 2001a: 604). Their actions imply calling into question knowledge instituted and traditionally monopolised by expert systems; recognising the impossibility of those systems' claims of rationality and control; and accepting blogging as a means of critically thinking and communicating about transport. They are, as this chapter suggests, part of an evolving breed of policy, media and advocacy actors, and as such, introduce a new player of sorts to the 'social game' (Beck et al, 2003). Their emergence has implications for *knowledge* about cycling-related transport policy, which is the subject of the following chapter.

Chapter 6: Blogging and the Production and Mobilisation of Policy Knowledge

The purpose of this chapter is to consider *how* bloggers exploit the medium's affordances to try to make a difference. It is especially concerned with the significance of knowledge and processes of learning in late modernity (see section 2.3). Knowledge is evidently significant in an age of information and reflexively modern risk societies in which individuals are said to increasingly be taking on responsibilities where expert systems are thought to fail (see previous chapter). 'The responsibility for mobility', is, for example, said to have 'become individualized' (Freudendal-Pedersen, 2009: 6).

The first two sections of this chapter are organised according to Fuchs and Hofkirchner's (2005) model of knowledge production (see section 2.3). The first section presents evidence of blogging in relation to two dimensions of that model: *cognition* and *communication*. The next section meanwhile presents evidence of blogging in relation to the model's third dimension: *cooperation*. Contra Fuchs (2008) who does not generally consider blogging one of the internet's 'cooperative' platforms, here it is demonstrated that *specific synergies* emerge from blogging. The third section, whilst maintaining the chapter's focus on knowledge, switches gears somewhat to discuss the *mobilisation of policy knowledge*, which bloggers are shown to contribute to in five ways.

Ultimately this chapter supports the notion that barriers to knowledge have lowered in late modernity, as risk society theorists suggest: '[E]pistemic authority no longer rests with particular groups of scientists, politicians and industrialists, but has fragmented across a huge range of social groups, the incessant interaction of which is potentially raising society to a qualitatively new level of self-critique' (Szerszynski et al, 1996: 6). By producing and mobilising policy knowledge, bloggers and their readers are shown to individually be taking responsibility for transport and its risks. They are shown to be knowledge *actors* with understandings of transport that are more abstract or conceptual than the experiential or practice-based knowledge with which the public is more commonly associated (see section 2.3).

6.1 Self-Organisation and Blogging as Cognition and Communication

Self-organisation is a process whereby systemic properties or patterns emerge unpredictably over time and iteration as otherwise disorganised or 'loose' components interact with and adapt to one another and their external environment (Fuchs, 2008; Fuchs and Hofkirchner, 2005; Urry, 2002b and 2005; see section 2.3). The internet and the technologies it supports are examples of self-organising systems, the decentralised structures of which constantly evolve as users alter content and coordinate themselves in relation to one another. In the case of blogs, self-organisation occurs

as new blog posts emerge, are read and generate reader comments, hyperlinks and/or other content (Fuchs, 2008). The connection between self-organising systems and knowledge production is made by Fuchs and Hofkirchner (2005: 241 and 246), who argue that 'all social self-organizing systems are knowledge-producing systems'; knowledge is a 'constitutive aspect of all social self-organization'.

The purpose of this section is to consider blogging in relation to the first two (of three) dimensions of knowledge-production, according to Fuchs and Hofkirchner's (2005) model: *cognition* and *communication*. The third dimension, *cooperation*, is the subject of the subsequent section.

Blogging as Cognition

Cognition is the *individual dimension* of knowledge production, according to Fuchs' and Hofkirchner's (2005) model, and in the case of blogs and other internet technologies, translates into *individual production and/or consumption* of online content. Participants referred to cognition in entangled terms of the *self*, *others* and the *consumption* and *production* of blogged content. That is, they recognised evidence of cognition in 1) others and 2) themselves as both *producers* and *consumers* of knowledge¹.

Recognition of Others' Cognition

London blogger Daniel:

a lot of the bloggers [...] are very good on statistics,² they're obviously people with a mathematical or computing background [...] some of the cycle bloggers are extremely diligent and extremely veracious [...] because they have a scientific background [...] and I think some of these people [...] have a lot of integrity [...] and I would [...] tend to believe some of these people above official sources because I can see [...] they are actually considering all the factors

Daniel's comment suggests a link between the *recognition of cognition* and the *legitimisation of* (*blogging as*) *knowledge*. That is, insofar as blogs represent *evidence of cognition*, and insofar as cognition is associated with greater truth ('veraciousness') and other virtues ('diligence', 'integrity'), blogs give readers reason to trust them ('to believe' as Daniel states) and hence, to legitimise them as sources of knowledge. Indeed, knowledge only becomes knowledge 'through our acceptance of it – by our ability to view it as knowledge and thereby legitimate it' (Hanlon, 2010: 216). Therefore

¹ See Bruns (2007: 1) on 'produsage' as a 'a new hybrid form of simultaneous production and usage'.

² For the context of Daniel's remarks, see blogger Williams' (2011a; 2011d and 2011i) analysis of Transport for London's statistical data.

instead of rather neutrally *recognising* others' cognition, it may be more appropriately said that some *legitimise* blogging as knowledge. Moreover, by legitimising the technical or scientific accomplishments of fellow bloggers, Daniel suggests that the distrust he and others expressed towards expert systems (in the previous chapter) is more a matter of their institutionalisation (i.e. as 'official sources') than the fallibility of expert knowledge per se.

That said, evidence of cognition was mainly recognised in terms of the *written word;* bloggers' ability to articulate critical thought and formulate arguments. This is hardly surprising, as raising awareness of and making a difference entails argumentation, but also because, despite the varied possible forms of expression (e.g. imagery), 'written language remains central to most blogs' (Myers, 2010: 4; see section 3.1). Hence:

there's some absolutely top quality blogging out there [...] articulating stuff really well, really wittily (London blogger Chris)

I read a few of [Cycalogical's posts³] and thought they are really, really well written [...] really good use of pictures and a really good writer (London transport consultant Nigel)

I'm full of admiration for the work some of them put into it, and as an editor... these guys write beautifully [...] Cyclists in the City [...] is a natural writer, plus, it's moving, I mean I got quite emotional about how he described [...] the young [cyclist] who died at King's Cross⁴ [...] I'm full of admiration for him, full of it, and others are equally good [...] so I'll read it and I love it because I'm so used to reading badly written stuff (London campaigner - and editor by profession - Iris)

there were lots of people discussing these issues at seemingly a very high level, with a lot of research going into it [...] much better backed-up than the kind of arguments I've been dealing with for years (London blogger Daniel)

BikeSnob⁵ could write about toothpicks and I would read him because he's just a brilliant writer (New York blogger Sara)

One particular blog - Crap Cycling and Walking in Waltham Forest - and its blogger - Freewheeler - are here again⁶ worth singling out for having been recognised by London bloggers as capable of articulating conceptual understandings of policy issues, and hence as thought-provoking:

³ See (Cycalogical, n.d.).

⁴ On which see 'Top 10 dangerous junctions for cycling in London - and TfL's complete denial of reality. It needs to build safer junctions instead of fobbing us off with whitewash' (Williams, 2011)).

⁵ See (Weiss, n.d.)

⁶ It will be recalled from section 5.4 that Freewheeler inspired others to start blogging.

it struck me that this was an extremely cogent and well-thought-out and well-written, well-argued piece of work (Daniel)

when he has [...] a really good point, they are really thought-provoking (Matthew)

there was a respect for the consistency of his blogging [...] secondly, the quality of his writing and his editing was first-rate [...] and thirdly, he knew his subject and whether one agreed with what he was saying or not, he made an argument (Chris)

Recognition of One's Own Cognition

Participants also spoke of the thought that goes into producing their *own* blogs; cognition that may ultimately be recognised (e.g. as well-written, well-argued) and legitimised as knowledge by others. For example, Londoner Daniel:

I put quite a lot of effort into writing coherent arguments and accounts of cycling situations [...] I'm really careful and I re-read things many times to make sure they're grammatically perfect [...] a major post might take [one or] two working days [...] the strength of the blog is that you can develop the arguments properly

High quality blogging tends to be characterised by its originality (see section 3.1), requiring that bloggers not only report information, but that they also think about it critically in order to communicate their subjective knowledge and unique spin, as New Yorker Martin suggests:

I have to be accurate, I have to fact-check, I'm not going to make up things, I'm not going to plagiarise, but I can shit on bike share [...] I can be objective about that or I can be opinionated [...] I have to strategise it

Martin's reference to 'strategising', as well as Daniel's to writing 'coherent arguments', allude to their respective readerships being consciously factored into their authorship. This is also illustrated in the remarks of New Yorker Charles, who understands his original contribution to knowledge in terms of having a story that others can relate to;⁷ articulating the qualitative and social (as opposed to the quantitative and technical) plot of transport risk:

we try not to get too verbose [...] the big problem transportation people were making [...] they'd be like 'all right, here's film about a speed hump', they would talk your ear off about traffic numbers and the angle of approach to the speed hump [...] what we care about most is telling the people [...] that

⁷ This contrasts with some understandings of blogging as incapable of resonating with a wider audience (see section 8.2).

their block will be safer, that they will have cars going slower, that their children will be able to more peacefully cross the street [...] there's a lot of politicians who don't... they aren't in our world, but they understand... [...] 'oh I get it, if you have a denser place and you put a train line through there then not as many people will want to drive, they won't need as much parking', it's like you try to keep it [...] simple

The above accounts all recognise blogging as subjective mental action; the individual acquisition of understanding via critical thinking. They also attest to the point that, just because knowledge production *has* an individual dimension does not mean it can ever be purely 'individual'. 'Knowledge production is a social process'⁸ and even this most individualised state entails acquiring and referring to 'prior knowledge produced by others' (Fuchs, 2008: 116).

Blogging as Communication

Communication is the *interactional dimension* of knowledge production according to Fuchs' and Hofkirchner's (2005) model, whereby cognitive individuals interact with one another through the mediation of blogs and other technologies. As they do so, they are 'confronted with the ideas and actions of other subjects whom they address with their ideas and actions' (Fuchs and Hofkirchner, 2005: 247). This convergence or *inter-subjectivity* results in changes to individual cognitive knowledge; *new* cognitive knowledge emerges.

Hyperlinks and Tweets

Hypertext markup language (HTML) is the standard language used to create webpages and facilitate communication via the internet. Hypertext is connected by hyperlinks, and the below three comments illustrate three slightly different ways in which these (and other) technologies are used to communicate the content of blogs:

I've forwarded [blog posts] to other people and said 'look what [Cycalogical] is saying about this' [...] and vaguely people have said to me 'you must check this one' [...] I've sometimes sent the link out to colleagues, 'look at this review, it's quite interesting what [Cycalogical] is saying, some of this is true, some of it isn't', so I do forward it on to colleagues at a professional level (London transport consultant Nigel)

if you read Streetsblog New York, even though probably 90% of the articles don't ever mention another city, you would have a pretty good sense of what was happening in other cities if you were a

⁸ A point that is neglected by risk society theorists concerned with individualisation, according to some critics (see section 2.2).

dedicated reader who was really clicking on the links and exploring a little bit... I mean, the hyperlink is quite a technology (New York blogger Mike)

how our stuff goes out is basically blog to blog, other blogs, blogs like our stuff, they get our stuff out by another blog, that's really how we work our magic (New York blogger Charles)

Hyperlinks generate readership by exposing and facilitating access to hypertext (i.e. one is more likely to read a blog if provided direct, hyperlinked access to it). Readership in turn raises awareness of (i.e. creates new cognitive knowledge about) a given policy area as individuals interact with one another via blogs (Farrell and Drezner, 2008). On one hand, hyperlinks are *social* insofar as they mediate interaction and intersubjectivity. On the other hand, hyperlinks *distinguish* individuals and their respective, subjective knowledge. From the perspective of the blogger, hyperlinks help fulfil egocentric desires for readership, peer acceptance and participation in a wider networked phenomenon. Thus blogging is also 'a device for setting [people] apart as individuals' (Myers, 2010: 3). In other words, similar to the way *publishing* is of value to academics keen to connect their research to the wider pool of knowledge and advance their individual careers, hyperlinks are the 'currency' of the blogosphere (Farrell and Drezner, 2008: 17). Whilst publication and citation rates are used to evaluate research and researchers, the hyperlink 'enhances visibility through a ranking system', and thus is one possible measurement of 'impact' (Lovink, 2007, 252). Common in both cases is the individual desire to interact (and perhaps cooperate) with, as well as to stand out from, the crowd.

Another way blog content is communicated is via Twitter, a 'microblogging' service whose users communicate via brief messages or 'tweets', which may include précis of blog posts and hence draw attention to them, their topic area and bloggers. Moreover, through the use of Twitter 'hashtags' - a word or phrase prefixed with the hash (#) symbol - Twitter messages are 'tagged' or grouped into topic areas, which may be viewed according to their frequency of use, with more popular topics 'trending' and providing some indication of what topics are being most talked about in the world (Twitter, 2010). As such, Twitter can act as an aggregator of sorts for those who do not have the 'time or interest to read hundreds of thousands of daily-evolving blogs' (Coleman, 2005: 278)... nor dozens or handfuls of them for that matter, judging by the following comments:

a lot of the news I get on cycling is Twitter-based [...] a tweet directing me to a blog rather than the blog itself (London journalist Paul)

Twitter is like an e-reader, you get these 150 character précis, it's like 'yes, oh yes, that's big, everyone's talking about this, that's a current issue' (London blogger Matthew)

Twitter has [...] brought me into the sphere of the blogger [...] I'm not sitting at my computer day-in, day-out reading these blogs but I probably read one a day, I go through Twitter (London campaigner Iris)

I don't so much read the blogs as follow the bloggers on Twitter (London campaigner Rosemary)

I've become more of a Twitter follower so I'm more likely to catch [the blogs] if they're tweeting (New York blogger Adam)

often I follow [the blogs] on Twitter, I mean, I can't, unfortunately, I can't spend as much time going through all the blogs (European campaigner Jacob)

Face-to-Face Social Interactions

Blogging mediates communication by coordinating face-to-face contact amongst individuals to 'talk and exchange ideas' (London blogger James). It will be recalled from section 4.3, for example, that the blogger-founded Cycling Embassy of Great Britain (CEGB) and Movement for Liveable London organise offline meet-ups for individuals whose initial contact is likely made online. Indeed it was through blogs that London blogger Daniel became aware of and attended such 'physical meetings', 'a series of events', where he met others who, it will be recalled from section 5.3, encouraged him to start blogging. Other examples include 'brick and mortar' campaigner Mark recounting how one of his colleagues gave a tour to a blogger visiting London from another country: 'these guys spent the afternoon together, there are a lot of connections in this world'. Mark also spoke of a particular London blogger who 'does a lot of talks [...] going around to cycling groups and explain[ing] his point of view', and as this blogger is a member of the organisation for which Mark works,

there's always going to be links through to him and [...] he's one of our members as well so he links to us, I'm not explaining how the internet works, you know, everything is so interconnected [...] [the bloggers] don't exist in their own bubble

Finally, bloggers Andrew in London and Sara in New York told me about their experiences meeting up - in person - bloggers from other cities¹⁰:

there's definitely a flow of information backwards and forwards because a couple of New York bloggers have visited me and [...] told me about New York (Andrew)

⁹ See also, for example, Streetsblog's (n.d./1) calendar of 'liveable streets'-related events.

¹⁰ See also the face-to-face meeting between the bloggers of BrooklynSpoke and Amsterdamize (Gordon, 2013) as well as the CycleChic Bloggers Conference (Colville-Andersen, 2011).

we travelled to London on other business and so I sought out [a particular blogger] because I follow all these people on social media [...] and same thing, [...] visited Amsterdam and looked up [another blogger] (Sara)

Section Summary: Self-Organisation and Blogging as Cognition and Communication

The accounts in this section may be interpreted as the realisation of intentions described in the previous chapter, whereby some blog in order to reflect critically on transport and to mobilise those reflections into a 'cognitive response' that may be shared with others (Beckmann, 2001b: 110, see section 5.4). The above accounts highlight some of the ways that communication takes place. This section is not the first in this thesis to present evidence of inter-subjectivity. Changes to individual knowledge are also evident, for example, in sections 5.3 and 5.4 where participants describe their initial interaction with blogs, or indeed, in the previous section where they recognise others' cognition in the form of high-quality writing and argumentation. Likewise, later chapters consider whether blog-mediated communication makes a difference to expert systems as 'receiving' systems (Fuchs and Hofkirchner, 2005: 247).

6.2 Self-Organisation and Blogging as Cooperation

Cooperation is the *integrational dimension* of knowledge production according to Fuchs' and Hofkirchner's (2005) model. That is, the interaction that takes place amongst individuals and their subjective knowledge during communication becomes, in instances of cooperation, *synergetic*: 'synergies are realized and thus they jointly produce something new' (Fuchs and Hofkirchner, 2005: 248). That 'new reality' (Fuchs, 2008: 33) cannot be predicted nor reduced to its micro elements, which, in social self-organsing systems, are human actors who 'co-ordinate their subjective, individual knowledge in such a way that objective, societal knowledge emerges' (Fuchs and Hofkirchner, 2005: 246; Urry, 2002b; 2005).

Online cooperation, Fuchs (2008: 30) argues, is characterised by the *joint production of digital content* (e.g. open source projects, wikis, virtual protest) and remains an exception rather than the rule of today's internet because the 'overall competitive social order' hinders the internet's cooperative potential. As such, despite the 'radical potential in [...] the political usage of blogs' (Fuchs, 2008: 135), there is only a 'minor faction of blogs devoted to cooperation'; 'islands' in an otherwise competitive sea (Fuchs et al, 2010: 56).

Evidence presented in this section supports the claim that a faction of such blogs does indeed exist. However, it also calls into question Fuchs' (2008: 131) main typology that does not classify

blogging as cooperative because its 'units of reproduction' (i.e. blog posts and reader comments) are (usually) individually-authored, and therefore assumed to be individually-produced. In other words, the interactive components of individually-authored blogs are generally understood not to achieve synergy and together produce 'something new' - a view that is challenged by the evidence presented in this section. Despite his emphasis on authorship, Fuchs pays comparatively little attention to unpacking the concept of authorship itself. This is problematic because authorship may be the result of cooperation; individually-authored does not necessarily equate to individually-produced. Indeed, to associate individual authorship with individual production would be to rely on an 'industrial paradigm' that 'no longer applies' (whereby informational and other goods are understood as 'discrete' units and consumers as 'mainly passive and isolated') (Bruns, 2007: 4; for more on the 'industrial' media paradigm recall section 3.1).

The section is organised into three parts, with cooperation shown to emerge 1) between bloggers and readers 2) between bloggers and reader commenters 3) as a result of conflict, community and consensus.

Cooperation Between Bloggers and Readers

To start out, consider blogger Nick's perspective on the production of Streetsblog:

we couldn't do what we do without the decentralised nature of social media [...] we're getting our stories from our readers in a way that's important, our biggest resource is the people who read us, who work in the field, they bike regularly, they think about this, they talk about this, they know the people who work in this, they're advocates, they're in agencies, and we'll get stories from them all the time, or a perspective

Nick is clear: the posts that Streetsbloggers individually author are the result of synergy with their readers (who of course may also be bloggers). One specific example illustrative of Nick's point are those readers who act as informants and approach bloggers to cooperate. Hence a New York city official contacted blogger Adam and provided him with the details of an otherwise 'secret' traffic plan, resulting in a blog post that Adam would not have otherwise authored, which in turn resulted in an unusually large turn-out at a community board meeting (see section 4.1) where Adam met another collaborator:

a professional urban planner guy handed me a stack of studies and was like '[...] every single one of them refutes Michael Primeggia's 11 claims that these streets are safer for pedestrians and better for business [...] check it out' [...] and again, the blog enabled me to... I just put the stuff up online, you

¹¹ Former NYCDOT Deputy Commissioner

know, I put links to it, I put little digests of it, and then whenever I linked back to the stories I was able to cite these studies [...] I was getting these links back to these really academic studies ¹² that regular people never would otherwise read, ¹³ so the blog also had this great archival value, you could put up a bunch of studies like that and keep referring to them in smart ways and they become part of the argument, you get to build a case

Despite Adam being the sole author of the blog posts inspired by the tip-offs, they are clearly joint productions that would not exist were it not for the cooperation of Adam and his readers. Moreover, his experiences illustrate some of the qualities of cooperative actors as identified by Fuchs (2008: 32-33), such as: *mutual dependence* (the informants needed Adam's blog as a media platform and his ability to author a story as much as Adam needed the informants to provide him with a plot that would help develop 'the argument' of his blog); *shared goals* (to expose information that demonstrates cycling and liveable streets being put at risk); and a *'concerted use of resources so that new systemic qualities emerge'* (tip-offs + the blog + Adam's talent for synthesising and presenting information = new digital content that interacts with its environment, which in turn adapts).

Cooperation Between Bloggers and Reader Commenters

Reader comments - like many of the blog posts they refer to - are individually-authored. Again however, over-emphasising authorship as some sort of 'discrete product' detracts from its production,¹⁴ which may entail readers and bloggers *commenting* in relation to one another. By getting 'real debates going with real feedback' (New York blogger Martin), reader comments may get integrated into new content bloggers would not otherwise author:

one of the most interesting things about [blogging] for me, you write about [...] London, and someone will come and say 'well, I live in Oslo and we have this' [...] [readers'] breadth of knowledge [...] is very broad and very geographically broad as well [...] if you're cycling in one city, then you seem, you know, it's like living anywhere, you think that what you experience is what everyone does, and one of the best things about the [blog] for me has been having commenters from all around the

¹² Adam was not alone in referring to the exposure of academic research in the blogosphere. London journalist Paul: 'in the comment threads of the bike blogs I hear the same research papers referred to again and again, so people who are arguing in favour of Dutch-style segregation will refer to the Lancaster University study [Pooley et al, 2011], which previously they wouldn't have heard about, and whenever there's an argument about red-light jumping [...] this big study done by [...] the Transport Research Laboratory [Keigan et al, 2009] [...] crops up again and again, it's released on the internet and then it runs free'. See also dr2chase's comment in (Dunckley, 2013): 'It was blogging, that called my attention to John Pucher's presentation at Simon Fraser University' (Pucher, 2013).

¹³ Indeed, London campaigner Mark was unaware of sociologist Dave Horton's work on cycling until he read it on a blog: 'bloggers become facilitators, like I'd never heard of Dave Horton until I read his thing on Copenhagenize' (Horton in Colville-Andersen, 2009).

¹⁴ Or indeed authorship's 'produsage' (Bruns, 2007). See section 3.1.

world, so for any single subject they'll go 'well, yes that's interesting, but in Amsterdam or even Dublin or wherever, we have this solution where we do this' [...] you can have this international debate where someone will say 'you might think it's common sense that everyone must wear helmets, but look at this blog... ' [...] I've personally been influenced a lot by reading what other people say (London journalist - and blogger (see section 3.3) - Paul)

The next section of this chapter discusses how blogging facilitates the movement of policy knowledge from place to place (as Paul suggests). Here however the point is that individual reader comments - cognition communicated - 'cause structural changes in the receiving system', which in this case, includes Paul (Fuchs, 2008: 247). Paul makes clear that readers' subjective knowledge influences him 'a lot', and although he does not state to what effect, it is not difficult to imagine their knowledge somehow being integrated into new content he authors. And whilst one could question the intentionality of the cooperation between Paul (or Matthew below) and his reader commenters (given that neither he nor they are presumably aware of any effects their actions have on each other), the very use of blogging suggests awareness of being a part of something 'bigger'; of participating in a wider networked phenomenon. That is, there is an implicit understanding that, by virtue of using the technology, cooperation is, or has the potential to be, taking place; intentionality is implied by participation. Moreover, Paul's remarks allude to some of the qualities of cooperative actors identified by Fuchs (2008: 32-33), such as: mutual learning (clearly Paul learns from his reader commenters, who, by commenting on his blog, have evidently thought about it and perhaps even learned something); communicating about 'conventions in order to reach a common understanding' (sharing different approaches or 'solutions' to cycling in order to better understand what is best for it); making a 'concerted use of resources so that new systemic qualities emerge' (the comment function is itself a specific resource or mechanism, see also below).

Similar to Paul, London blogger Matthew explained how actual, but also even *anticipated* reader comments get integrated into his blogging:

[I] try and vary the content to [...] ensure that the level of discourse doesn't become polemic [...] there's nothing more dull than six people sitting around a table [...] finding different ways to say the same thing that they all agree about, what I want, and what I value the most, or what I get back from writing the blog is discourse with people who read it via Twitter, Facebook and the comments section who say 'hey no [...], you're wrong about this' or 'why haven't you thought about women in this role?' [...] to have that challenge of debate is what's really stimulating for me [...] it's endlessly fascinating [...] it's always growing and there's always something new coming into it and there's always something which will raise my interest, pique my interest, teach me something, I'll go 'oh, I haven't thought of it like that' or 'this person's opinion is correct'

In the language of self-organising systems, the comment function of blogs could be understood as an *internal feedback mechanism*. The comments themselves meanwhile serve as *feedback loops* - 'the defining property' of self-organising systems - that encourage or discourage bloggers such as Matthew to author content in different ways as his cognitive knowledge is affected (Lash, 2001: viii). This scenario illustrates Lash's point that such is the importance of the individual in second modernity that it is through him or her that feedback loops pass. The individual is the 'point of passage' for system change; individualisation is 'system destabilization' (Lash, 2001: viii). Indeed, Matthew's references to 'always growing' and 'always something new' suggest emergent qualities resulting from synergy between him and his reader commenters. Like Paul, he is clearly influenced by the knowledge of his reader commenters (who may say something similar about Matthew's effect on them as a blogger).

Another way of demonstrating the cooperative potential of reader comments is just to consider their absence. That is, the scenarios described above do not 'just happen'; not all blog posts are read; not all blog posts develop synergies with readers that result in new content; and not all bloggers enable the comment function of their blogging software¹⁵.

Cooperation as a Result of Conflict, Community, Consensus

Conflict

Another point to extract from Matthew and Paul's remarks, is the role that *debate, knowledge conflict* and *controversy* play in cooperation and coproduction. Cooperation is not always free of conflict, and indeed, may exist precisely because of it, in terms of conflict getting in the way of achieving the 'shared goals' and 'shared understanding of social phenomena' that cooperating actors otherwise tend to have (Fuchs, 2008: 33). Indeed, on a 'non-escalating level'¹⁶, conflict can actually be *constructive and productive*, such as when it leads to substantiation of claims or creative solutions. Illustrating this point, London blogger Daniel compared blogging with scientific literature:

the way the scientific process works [...] is that you have a peer review process whereby people are constantly trying to prove you wrong and they're constantly trying to pick holes [...] [blogging] is a bit of a courtroom kind of situation, an adversarial situation, people do argue these things out like they would in peer-reviewed scientific literature [...] before we had the internet [...] there was no way of

¹⁵ This includes, for example, Freewheeler of Crap Cycling and Walking in Waltham Forest (n.d.), whose decision not to enable commenting on his blog was criticised by some (see section 8.3) and defended by others, such as fellow London blogger James who argued that Freewheeler 'just would never have had time to do anything else if he had to deal with those people [who he criticised on his blog] answering back'.

¹⁶ On the other hand, for a discussion on what happens when conflict reaches an 'escalating' level, see Chapter 8.3.

checking all this stuff and people would just come up with things and [...] and you could never find the source of what they quoted and it was always half-quoted and distorted in some ways and you would never really get to the bottom of it, what was the study? what did the original study really do? you could never find out and so now we have this, a network, we have a real network where people can cross-check everything and really say 'well did this study really say what you're claiming it says? were they really studying what you were talking about?"

Blogging is, in other words, a way of having one's 'ideas reviewed by others who might bring facts that you missed and perspectives which were unavailable' previously when cycling was more likely to be discussed 'behind closed doors' (Dunckley, 2013). The prospect of being publicly judged by diverse others means, as it does with academic or any form of publishing, that a certain level of quality control is embedded in the blogging process: 'if you are going to announce adherence to an idea in a form that attaches it to your name for all to see, potentially permanently, you make extra effort to ensure that it is not a foolish one [...] Blogging is primarily a means of motivating oneself to research a subject meticulously, and think the issues through thoroughly' (Dunckley, 2013).

The more people who read a blog, the more potential peer reviewers¹⁸ it has and the more important it becomes for the blogger to support their claims with 'concrete examples' (e.g. photographs) or other evidence: 'you can't just say 'I think this is crap' and know it, you can't just know it, you have to be able to back it up' (London blogger Matthew). In order to overcome the very problems Daniel describes, other bloggers recounted the steps they take - namely, *making a concerted use of resources*, including hyperlinks and the prior knowledge of others - to back-up their own knowledge claims (Fuchs, 2008):

one thing we are actually conscious about is linking back [...] so if you come to this as 'okay, I'm interested in this bike lane going up in front of my apartment building' or 'I just read this article and I'd like to learn more' that you can follow it back and back and back and back [...] some of those [hyperlinks] will lead out [to other sources], and some of those will lead in [self-referencing] but we want [the blog] to be not just a news object but one that really dynamically can give you a lot more information (New York blogger Nick)

you can not only tell people, but also provide them with the link (London journalist Paul)

Community

¹⁷ For example, Daniel went on: 'people would claim that segregated cycle paths were dangerous and then you would try and find out what that was based on and [...] nearly always [it had] to do with people cycling up and down mountains [...] nothing to do with [...] an urban environment [...] it wasn't a deliberate dishonesty, it was just a Chinese Whispers process, there was no integrity to it'.

¹⁸ There are many examples of such regulation online, particularly in relation to consumer protection (e.g. customer reviews eBay, Amazon or Airbnb).

Uniting these comments and the attention to detail they convey, is another quality of cooperative social relationships: *mutual responsibility* (Fuchs, 2008: 33). Echoing Beck (1999), Fuchs and Hofkirchner (2005) argue that knowledge-based societies *are* risk societies because knowledge implies awareness of risk. Knowledge or awareness meanwhile implies *responsibility* for mitigating risk, and along with responsibility comes 'an unavoidable pressure to co-operate' (Beck and Sznaider, 2006: 12). Reflexive, risk-afflicted individuals, aware of their dependence on the knowledge and 'non-knowledge and mistakes of experts' (Beck, 1999: 266), but having gained some knowledge independence via ICTs, *develop a sense of mutual responsibility* for solving social problems, producing knowledge 'as a strategic resource' and for each other as producers of knowledge (Fuchs and Hofkirchner, 2005: 254):

[the blog] has maintained a pretty high level of quality in the comments section, so you get people who are pretty willing and able to talk about actual policy issues [...] and debate stuff, it doesn't become this... you know, a lot of times on politics blogs [...] people start yelling at each other immediately, I think the bringing together aspect has something to do with just the nature of it being such a niche policy focus¹⁹ (New York blogger Adam)

Notable here is Adam's reference to the 'bringing together aspect' of 'liveable streets' blogging as 'niche', which suggests that cooperation and mutual responsibility emerge because sticking together is *best for the movement* (whereas disparity weakens it, see section 4.3); because *individuals need support* (individualisation can indeed be a burden, see section 5.4 blogging to be social); and because they *trust* they can find it in each other (if not in expert systems). As Fuchs (2008: 33) puts it, cooperative actors 'feel at home and comfortable in the social system that they jointly construct'. Indeed, comparing the relationships that connect bloggers and reader commenters with those of 'family' and 'community', London bloggers John and Andrew stated:

it's wonderful finding the sort of people who [...] start following what you read, and it's really, really wonderful finding out what other people have to say [...] above all else, when people start putting comments to your posts, and then a discourse can start, then you suddenly start feeling part of a greater family, which is definitely empowering in itself (John)

[my blog] has become more conversational than I realised it would be [...] I really feed off the fact that there are these people leaving comments [...] it gives people a kind of venue to sometimes vent their frustrations and other times just to learn from other cycle commuters [...] there's a very strong sense of community [...] everyone's in the same boat together [...] there's definitely a sense of 'we battle on through our cycling everyday and therefore we're a community together', perhaps it comes

¹⁹ See also however section 8.2 on the limitations associated with a 'niche policy focus'.

from being a minority road user group but there's definitely a strong connection [...] these two-way conversations are crucial to it (Andrew)

In addition to 'family' and 'community' other social structures to emerge from blogging are the Cycling Embassy of Great Britain and the Streetsblog Network (see sections 4.3, 4.4 as well as the next section). That is, the very emergence of these collective entities can be traced back to synergies that developed amongst individual bloggers with a shared sense of purpose. Had they not coordinated themselves via blogging, the CEGB and Streetsblog Network would not have emerged, at least in their existing forms. Because they did however, the individuals involved are better-positioned to realise their common goals than had they acted in isolation.

Consensus

Synergy that emerges between bloggers and reader commenters is understood to take any sense of shared purpose and understanding to new levels; to help them 'reach their goals more quickly and more efficiently than on an individual basis'; to produce a combined effect greater than the sum of their individual effects (Fuchs, 2008: 33). Hence London blogger James referred to blogging and commenting on blogs as 'increasing the message coming around to the same thing', whilst fellow London blogger Matthew stated:

we're all forming this level of consensus between ourselves [...] that's the really key bit, it's not what [bloggers] write, it's the comments afterwards, where a platform for advocacy is being formed, where people are singing from similar hymn sheets or their perceptions are being challenged by this kind of looping around of ideas that's going on

Although not participating in these processes in the same ways as Matthew and James, London city official Samantha seemed to reach similar conclusions. Here she considers the possibility that the social media-effectuated interaction of different subjective cycling knowledge may result not only in new *subjective* knowledge ('people coming up with ideas') but also, in the emergence of collective, or indeed, 'homogenised' systemic properties - new social or *objective* knowledge about cycling:

lots of individuals who happen to like cycling like hearing about what other people that like cycling have to say... and it's a much more diffused network, I think people come up with ideas and I think they kind of get out there quicker, so in a sense maybe... it's interesting, maybe cycling worldwide is becoming more homogenised through social media

Indeed the homogenising or synergetic effect of these processes - cognition and interaction - London blogger Chris likened to cream: 'the cream as it were rises to the surface' (see also section 7.3 on bloggers reaching consensus). Homogenisation meanwhile has implications for separation and heterogeneity, and the new exclusions resulting from these system changes are discussed in Chapter 8.

Section Summary: Self-Organisation and Blogging as Cooperation

The evidence presented in this section suggests that blogs about cycling-related transport policy should be included amongst the 'minor faction of blogs' that Fuchs and colleagues (2010: 56) recognise as 'devoted to cooperation'.

One reason why so few blogs are understood to achieve cooperation is, I would suggest, not because more do not exist, but because of unnecessarily narrow criteria for what constitutes internet-mediated cooperation (Fuchs, 2008; Bruns, 2007). That is, cooperation seems only be recognised as such when the contributions of more than one actor 1) are not attributed to any one person, 2) are digitally traceable as interactive 3) on a 'centralized site of collaborative work' (Bruns, 2007: 1) 4) which is perpetually unfinished, evolving and 5) existent in its entirety as a discrete unit and 6) only ever as a temporary or 'momentarily current' (Bruns, 2007: 5) latest version by virtue of the software/technology used (e.g. wikis and other open source software). In other words, in this view, cooperation is largely pre-determined by the use of 'cooperation technologies' (Fuchs, 2008: 184), with users of other internet technologies understood to manage knowledge only at cognitive and communicative levels.

As this chapter demonstrates, such a view disregards alternative practices of internet-mediated cooperation that entail multiple contributors whose synergy 1) cannot be digitally traced because 2) it takes place offline 3) and/or through the combined use of different software/technologies (e.g. blogging and Twitter) 4) and/or the software/technology used is not palimpsestic and hence new properties can only emerge across a series of 'permanent', dated/archived and discrete units of which one 'site' may have many (e.g. blog posts, tweets) 5) and/or the software/technology used does not allow for more than one individual to contribute to the same unit of writing/production and hence each unit can only ever be attributed to a sole author regardless of any cooperation that may have resulted in its production.

The next section discusses the role of blogs in mobilising *policy* knowledge.

6.3 Blogging and the Mobilities of Policy Knowledge

Knowledge systems, like other social systems in second modernity, are characterised by movement, loosening foundations and shifting boundaries (Beck et al, 2003). Distance no longer has the same hold on the mobility of information, nor the people and goods it once relied on to be delivered. The split between communicative and physical mobilities, combined with the speed of the former accelerating at a much faster pace than the latter,²⁰ mean that knowledge is more than ever 'quite substantially detached from territorial space'; unable to be 'confined to a fixed and limited territorial location' (Fuchs and Hofkirchner, 2005: 254; Morley, 2011; Packer, 2008; see section 2.1). The disembedding and globalisation of knowledge are equally matched however by its reembedding and localisation elsewhere, into recipients' 'local cultural contexts of action' (Fuchs and Hofkirchner, 2005: 255). Such 'local globalness' is especially apparent with a particular type of knowledge, *policy knowledge*: 'expertise or experienced-based know-how about policies, policymaking, implementation, and best practices' (McCann, 2011: 109 and 120). When studying how policy develops, knowledge should - 'at a minimum' - be taken into account, Wolman and Page (2002: 478) argue; policy is 'made in communicative interaction' (Freeman, 2012: 13).

This final section of the chapter thus considers the mobilities of policy knowledge. In doing so, it draws particularly on the work of McCann (2011; 2013: 9), who in turn, draws on the work of mobilities scholars to examine *policy mobilities* as the 'social production and circulation of knowledge about how to best design and govern places' (and to mitigate risks, I suggest). Not all actors engaged in the production and mobilisation of policy knowledge are however accounted for in the literature, which tends to understand *policy actors* as representatives of expert systems, professional organisations and other institutions, and correspondingly, *policy knowledge as expert knowledge*, with the roles of other actors, knowledges and the internet as a mode of knowledge production/distribution/consumption largely ignored (Bruns, 2007, see sections 2.2 and 2.3). All this despite the context of late modern risk societies in which knowledge boundaries are more than ever fluid, mobile, open and shifting, and in which the 'duty and necessity to cope with [risk] is being individualised' (Bauman introducing Beck and Beck-Gernsheim, 2001: xvi). In this section therefore I discuss evidence of blogging as a means of mobilising policy knowledge and transforming ordinary citizens into policy actors.

Blogging and the Lines of Policy Movement from A to B

there's a national conversation, there's an inter-city conversation, there's a global conversation [because of Streetsblog and Streetfilms] (New York campaigner Claire)

²⁰ New York blogger Martin: 'biking is [...] such an analogue 'I'm going to pick this thing up and ride', it's so old school, it's old technology as [...] data moves faster, but the bike is still human power, the tortoise and the hare'.

Like knowledge *production*, the *mobility* of policy knowledge is a self-organising social process involving communication and interaction amongst actors, sometimes resulting in emergent systemic qualities (Freeman, 2012; Marsden et al, 2011; Wolman and Page, 2002). Whether new policy ultimately emerges during the course of this interaction is however not the point: 'Policy transfer is not an all-or-nothing process' (Dolowitz and Marsh, 2000: 13). That is, as with physical and other mobilities, there is more to the movement of policy knowledge than origins and destinations: 'something happens to policy knowledge along the way, in the telling' as it moves from A to B (McCann, 2011: 117; Peck and Theodore, 2010). That 'something', McCann (2011) argues, tends to be under-explored, much in the same way that it is with other mobilities, according to others (Cresswell, 2006; Sheller and Urry, 2006). Indeed, that something is all the more a black box I would argue considering the diversity of policy *actors* and *knowledges* that remain largely unacknowledged in the policy transfer literature, which favours understandings of both as expert and instituted (see sections 2.2 and 2.3).

One way to open up the 'lines of movement', McCann (2011: 112; McCann and Ward, 2010) suggests, is to approach them by their 'seemingly banal' 'micropractices and microspaces', which he does, for example, in the context of policy travel by delegations of policy elites, and which I do here in the context of policy blogging by citizen actors. What constitutes blogging's lines of policy movement? How does blogging mobilise policy knowledge? What are its mechanisms? How can bloggers be understood as policy actors? The evidence that follows provides some insight into what happens as policy knowledge moves - via blogs - from A and B. Indeed the As, Bs and lines of movement discussed in the remainder of this chapter are represented in Figure 2, and five mechanisms of 'back-and-forth teaching and learning' (McCann, 2011: 108) structure the following discussion:

- 1) Policy tourism and counteracting policy immobilities
- 2) Legitimating policy knowledge
- 3) Supplying policy knowledge and fuelling imaginative and reflexive mobilities
- 4) Visualising policy
- 5) Leveraging policy

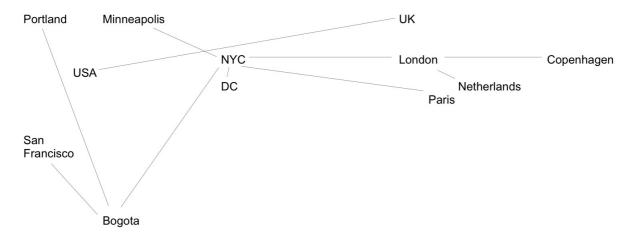


Figure 2. The As, Bs and lines of movement discussed in this chapter.

Policy Tourism and Counteracting Policy Immobilities

In 2011, bloggers and others supportive of the Cycling Embassy of Great Britain (see section 4.3) organised a 'study tour' to the Netherlands (Hinchcliffe, 2011a)²¹. Like other actors engaged in policy travel, their purpose was 'to learn firsthand from their peers in other cities' about local policy²² (McCann, 2011: 118; Cochrane and Ward, 2012; Cook and Ward, 2011; Ward, 2007). As London transport consultant Nigel, whose interview happened to coincide with the dates of the study tour, described it:

they're in the Netherlands at the moment the Cycling Embassy people, I checked their site this morning, they're on a fact-finding mission, if you could count the number of British transport-planners that have had trips to the Netherlands, so many people have done it, the problem is we don't know how they do it over there

That Nigel was actively paying attention to the movements of a group of bloggers is notable in itself, as he represents a more elite, or at least instituted, type of policy actor (e.g. technical experts, policy-makers) more commonly associated with such travel and the knowledge it imparts. Indeed one point to draw out of the CEGB trip is how it intersects with traditional notions of policy travel²³ as a relatively exclusive type of movement and means of mobilising knowledge. In that

²¹ For highlights of the tour see (Hinchcliffe, 2011b) and (CEGB, n.d./1) and Hembrow, 2011.

²² The CEGB tour to the Netherlands is not the only instance of bloggers participating in policy travel. See also for example (Arditti, 2013b).

²³ On the difference between then and now: 'people have always gone abroad, people have always gone to Copenhagen and had their views changed [...] but [if] then they blog about it, they have that reaching out influence' (London campaigner Mark); '[blogs] have enabled the spread of policy ideas from one place to another [...] I mean sure, policy ideas spread around, that's always been the case, but the speed with which the blogs have helped these ideas spread [...] is just phenomenal [...] something that was just not

sense, one interpretation is that former boundaries (to physical and communicative mobilities) have opened and emerged as opportunities, with the CEGB trip reflective of macro-level changes in knowledge discussed in section 2.3. Another interpretation however is that the reason ordinary citizens are travelling to learn about policy is less about new opportunities available to them and more about their perception of policy elites failing to take advantage of policy travel or failing to mobilise knowledge even when they do travel (as Nigel suggests above). That is, policy elites are understood to be unreliable, and knowledge unnecessarily static, with individuals taking it upon themselves to pick up the slack. As such, one participant²⁴ in the CEGB tour told me that a study tour in the Netherlands is something they 'will have to recommend to all the highways engineers and the councillors and politicians' in the UK (as if they had not previously engaged in policy travel), whilst another lamented the perceived tendency of professionals to avoid physical travel and replace it virtually:

unfortunately there are many [...] still prepared to play 'armchair engineer' through Google Streetview²⁵ [...] it allows junctions [...] to be taken completely out of context with no understanding of the surrounding cycle network or traffic volumes and purposes of the roads [...] it should under no circumstances be used as a substitute for actually going and experiencing a given area²⁶

Whilst more will be said momentarily about technologies and places *supplying* policy knowledge, here the point is how it is *acquired*, and moreover, the perceived need some individuals evidently feel to self-organise, to act, to become policy actors, to become policy tourists, to take personal responsibility for mobilising policy knowledge because they do not trust the experts to do so. Indeed, one participant described an effect of the study tour as the realisation that he had 'been lied to' by UK policy-makers who seem to suggest that transport policy of the type he witnessed in the Netherlands is not even a possibility.²⁷

possible prior to the internet' (New York blogger Adam).

²⁴ I have chosen not to use participants' pseudonyms here as a means of further protecting their identities. As the number of tour participants was low, their identities could possibly be linked back to comments elsewhere in this thesis by way of pseudonym.

²⁵ Indeed, London transport consultant Nigel uses Streetview not only to 'visit' Denmark and mobilise policy knowledge, but also to effectively circumvent the policy boosterism and best practice cherry-picking he suspects he would selectively be shown on a site visit: 'I've been [...] honing in on a Danish town or city, [...] not looking at their design guidance which picks the best stuff but just looking at an average city and seeing what they do [...] [it] is a really powerful tool and I've used that in research proposals, I've taken a grab from Streetview and said 'look this is what they do here, maybe this is something we can try".

²⁶ Tour participants were quick to point out that blogging (like Streetview) alone is not a sufficient source of policy knowledge; one needs to *experience policy* in order to truly grasp it (see also (Arditti, 2011 and 2013b): 'I thought I knew Dutch infrastructure by [...] reading blogs, however my view [...] changed utterly after I actually [...] experienced it' (London blogger John).

²⁷ Likewise London journalist Paul: 'the fact that there is an alternative [to UK cycling policy], that's very much been spread by the internet'.

The notion of static or immobile best practice policy knowledge was also raised by participants in other ways. London blogger Daniel for example spoke of the perceived tendency of British policy-makers to favour American or other Anglophone 'worse practice' that is culturally, economically or otherwise more familiar or acceptable²⁸ (Jonas and Ward, 2002; Newburn, 2002). Such bias or uneven policy mobility is something Daniel attempts to counteract through his blogging:

there is always this very powerful draw [...] in all areas of British politics to take things from the United States [...] and so the whole task of trying to shift British policy to be more influenced by European nations is really made difficult [...] and so I'm always trying to work against that, I'm always making that point

Another threat to the mobility of policy is the media, which plays a role in framing not only risk (as discussed in section 4.2) but also policy as 'good' or 'bad', or indeed, *risky*, as the following remarks by New York blogger Nick attest (McCann, 2011). Prior to the launch of New York's bike share system (see section 4.1), some of the local media engaged in *policy scaremongering* by reporting on the system's anticipated dangers: 'this was a narrative you could see in a lot of the mainstream reporting' (blogger Nick). In an effort to counteract these reports, Nick

looked at the safety statistics for bike share in other cities around the world [...] called up London and Paris and Washington, DC and Minneapolis [...] and [blogged about it] 'we did the math, in each and every one of these cities, the safety statistics are significantly better than they are for people riding their own bikes'

Legitimating Policy Knowledge

In their work on the 'sites and situations of policy-making', McCann and Ward (2012: 42) recount some such sites and situations where they have found themselves doing fieldwork as they 'follow' a policy: 'conference halls, corporate offices, drug consumption rooms, mini-buses, cafés, and hotel bars', as well as a 'range of cities'. It is in such places and 'spaces of travel' where policy actors are said to establish weak ties, discuss expertise, learn lessons, develop trust and make and break reputations; they 'connect[] what would otherwise be socially and spatially isolated policy communities' (McCann, 2011: 119).

Without dismissing their obvious importance, an over-emphasis on the surroundings associated with policy actors' physical travel risks neglecting other spaces and indeed other means of

²⁸ Daniel attributed a fellow blogger with 'always going on about this point', which is one of several that emerged amongst different clusters of interview participants in such a strikingly similar way as to suggest the synergetic coordination of subjective knowledge to the point that collective, social knowledge had emerged.

mobilising policy knowledge, not least for example, online. Policy knowledge is carried in more ways than human vessels traveling to and fro, and moreover, the desirability, feasibility and necessity of policy travel as physical movement is questionable in the context of the very risks these actors are seeking to overcome (e.g. environmental risks and economic costs²⁹ associated with transport), coupled with affordances of the internet. Whilst there has always been *virtual travel* and co-presence enabled by the *movement of information* between geographically-distant people, such opportunities have obviously expanded in recent times (Szerszynski and Urry, 2006: 117; Urry, 2000). As such, New York blogger Nick explains how he interacts with policy actors and knowledge in Portland without ever having been there:

with a lot of the cycling stuff [...] it's so hyper-local [...] [the] BikePortland [blog] does great work, but I don't care about most of it because it's Portland and I've never been to Portland and I don't know what he's talking about, so he says 'North Williams Street', you know, this intersection or that, and it just doesn't mean anything to me, but over Twitter, I can see 'oh, this is a story that I would actually really like to read' because maybe he's dealing with some issue that we've been trying to think about, so I can abstract it a little bit more and Twitter also really amplifies which those stories are because the ones that are Portland-specific won't show up ten times in my feed, they'll just show up once or twice and the ones that really have generalisable importance will get bounced around [see section 6.1 on Twitter as an aggregator]

In other words, when making the judgement whether it is 'worth' acquiring and mobilising a particular nugget of policy knowledge, Nick relies on his peers' reviews and 'citation rates' much in the same way as academic scholars (see section 6.2). Indeed, as Peck and Theodore (2010: 172) argue, blogging - one of the 'new arenas for policy exchange' - 'place[s] a premium on the circulation of legitimated forms of practice-knowledge'. So whilst knowledge is exchanged, reputations made, lessons learnt and trust developed in conference halls, offices and hotel bars occupied by policy actors when they travel, so too it is by actors who remain more or less physically still. Moreover, the 'premium' blogging places on legitimated practice knowledge (combined with the crisis of legitimacy facing expert knowledge) may be the vehicle underlying the movement described below by London blogger James, whose confidence in advocating transport policy he himself has not experienced, further demonstrates the limitations of over-emphasising policy actors' travel at the expense of other mobilities:

I've not been to Copenhagen, I really ought to if I'm going around saying that they've done it right, entirely based on what other people have told me

^{29 &#}x27;We go to far fewer [conferences] than we did because of the changes in spend and the new environment that we're in' (London city official Annabelle).

Supplying Policy Knowledge and Fuelling Reflexive and Imaginative Mobilities

The perspective painted thus far is mainly from the 'demand side' of policy mobilities, whereby actors attempt to pull, or acquire policy knowledge³⁰ (McCann, 2011: 109). Turning things around, scenes of the 'supply side' emerge, such as the CEGB's tour guide in the Netherlands also being a blogger³¹. Blogs such as his,³² as well as others³³ originating in the Netherlands and Denmark as recognised places of cycling best practice are attributed with showing others what they 'are missing' (Dunckley, 2013) and were described as follows by London bloggers:

those are influential blogs [...] anyone with an interest [...] in cycling and campaigning [...] follows things like that because they provide us a perspective of what our world could be like, they show the way forward (Andrew)

they are the people from the shiny 'this is what it could be' end of things [...] going 'yeah look, it can be done, this is what it takes' (Chris)

they're also very visual websites [see also below on 'visualising policy'] so it allows you to tap into an aspirational identity of 'what might be' and I think that's what blogging is really really good at (Matthew)

when people come up with the tired old arguments³⁴ against the Dutch model 'why Britain's doing just fine as it is' they can actually see [on these blogs] what the Dutch and the Danes are doing, when there's the argument 'we don't want cycle tracks because...' and 'they give way at every junction' and 'they don't work with traffic lights' and 'they're too narrow' and 'they're not maintained' you can go [online] and see all of the ones in the Netherlands and Copenhagen do have priority and they do work with traffic lights and they are maintained [...] the big value [of these blogs] for the UK is just showing people that it can be done differently (James)

³⁰ According to Wolman and Page (2002), the policy transfer literature is overwhelmingly concerned with policy's demand, rather than supply, side.

³¹ Bloggers as policy tourists with a blogger as a tour guide raises questions about the degree of interaction amongst *different* types policy actors.

³² See the tour guide's blog at Hembrow (n.d./1); more information about his 'study tours' Hembrow (n.d. 2); and a video of the guide and a tour at Eckerson (2014b). Incidentally, like the tour guide, others combine blogging with alternative (and possibly remunerative) ways of communicating their cycling-related knowledge. For example, some are also authors of books (e.g. BikeSnobNYC, 2010; 2012; 2013); Colville-Andersen, 2012; Glazar et al, 2011; Kambanis, 2012; Randerson and Walker, 2011); public speakers (e.g. Ames, n.d.; Colville-Andersen, n.d./1; ITDP, 2012); consultants (e.g. Copenhagenize.eu, n.d/2); reviewers, sellers and advertisers of products and services (e.g. Kambanis, undated).

³³ See for example Wagenbuur (n.d.) and Colville-Andersen (n.d./3).

³⁴ Also on the value of blogging for countering tired old arguments, New York blogger Nick: '[as a blog] we can say 'we actually have some ability to learn from other places', which is something that the tabloids especially, fundamentally do not believe [...] if there's one thing that brings New Yorkers together, it is the belief that New York is a special snowflake, you know, 'this is New York, it would never work here' or 'this is New York, it's totally different'.

More than sources of knowledge, blogs can evidently be the fuel of imaginations. And the capacity to imagine other places - *imaginative travel* (Urry, 2000) - like physical travel, has implications for reflexive and policy mobilities. 'Real and simulated travel' enable reflexivity: 'a person with no knowledge of a world that lies beyond his or her immediate physical boundaries will not be capable of self-interpretation [...] [through travel] cultures learn about themselves while learning about others' (Beckmann, 2001b: 111). That is, by being positioned relative to others, individuals develop the capacity to critique themselves, including 'their self-produced risks of bodily movement', in turn prompting demand for policy knowledge that can help mitigate those risks.

Visualising Policy

Looking back at some of the comments cited above, the notion of acquiring policy knowledge *visually*³⁵ is one that crops up again and again, sometimes more subtly than others (e.g. 'they provide us a *perspective*'; '*look*, it can be done'; '*see* what the Dutch and the Danes are doing'; '*showing* people that it can be done differently'). Despite the explosion of digital imagery and thus opportunities for what Urry (2000) labelled *imaginative travel* (via images of elsewhere) over a decade ago, not to mention the obvious importance of visualisation to the articulation and understanding of ideas, *policy imagery* remains an under-researched area of policy mobilities. Indeed, Urry and Sheller (2006: 212), argue more broadly that the social sciences has not sufficiently examined the movement of images and communication, including I would suggest, the movement of images and communication *about* physical movement, as one of the many the connections between mobilities (Urry, 2002a).

'Before you had to travel places to see things', New York blogger Charles told me. Now however, in part because of the Streetfilms he and his colleagues produce, the *visualisation of policy* (like other forms of communication, as well as transport) is less dependent on proximity. That does not however negate the importance of sensory experience, the 'atmosphere or 'feeling' of particular kinds of movement' as experienced in a given place (Sheller and Urry, 2006: 218):

until you see it, feel it, experience it... [...] in our films we try to be 'in' things [...] we try to get a feel and we try to be 'in' it [...] that is one thing we've always thought about (Charles)

Indeed amongst the infinite examples of policy imagery in blogs (and recalling that not all internet platforms are as rich in multi-media, see section 3.1), Streetfilms - 'fantastical transportation media'

^{35 &#}x27;It's not so much the blogs, [however] persuasive, it's the videos. Seeing is believing!' (blog commenter mmurray57 in Dunckley, 2013).

stands out (Eckerson, 2014). One of the most-watched Streetfilms is about Bogota's Ciclovia³⁶. It is credited with mobilising policy knowledge from Bogota to numerous other cities³⁷, including San Francisco. As New York blogger Adam explained:

advocates in San Francisco were trying to get [the] mayor [...] to close down the streets on Sundays [...] and they weren't getting any traction, for months [...] they couldn't get the mayor to listen, and then finally the Sustainability Director [...] got a couple of minutes of [the mayor's] [...] time and he said 'look, I'm going to put a laptop in front of you, just watch this video for a few minutes' and they put the Streetfilms Ciclovia video in front of [the] mayor [...] and apparently 2 minutes into the video [...] he's like 'yeah yeah, okay, I get it, I get it, definitely, we've got to do that, let's do that' [...] so Streetfilms took this idea, a group of people from New York, took an idea from Bogota, put it together as a video that advocates in San Francisco then used to create a fundamental policy change in San Francisco,³⁸ and that particular video [...] was used repeatedly like that, so that video allowed that idea, or helped that... accelerated the spread of that idea, I'm sure the idea would have spread anyway at some point, and that little Streetfilm produced change in a number of cities, very specifically, where an advocate showed it to a group of people [who] were like 'yes, we're doing that', decision-makers, that would have been much harder to do prior to the internet, I mean, it just was

Illustrating the extent to which these individuals, systems, cities, technologies, knowledges and other actors are networked, mobile and part of 'back-and-forth teaching and learning process[es]' (McCann, 2011: 108) or 'simultaneous production and usage', and *not* uni-directional movement, or linearity in the sense of the industrial-model value chain and media model (see section 3.1), understood as a 'producer \rightarrow distributor \rightarrow consumer trichotomy' (Bruns, 2007: 1 and 2), New York blogger Charles stated:

we did a film about neighbourhood greenways in Portland³⁹ [...] and the new mayor of Bogota tweeted [it], so it shows you that all these different cities have all these different best practices, that you can still learn, 'oh we're learning from Bogota, now Bogota's learning from us'

Leveraging Policy

Drawing on policy knowledge supplied from elsewhere enables bloggers to leverage that knowledge locally. Leverage is a particular type of movement made possible through the use of a tool (a lever) that generates pressure by *opposing one force against another*. Socially speaking, it

³⁶ See Eckerson (2007a). Ciclovia is programme 'in which streets are closed temporarily to motorized transport, allowing access only to walkers, runners, rollerbladers, and cyclists for recreation and socialization' (Sarmiento et al, 2010).

³⁷ See videos of Ciclovias in different cities tagged as 'CicloviaMadness' on Streetfilms (n.d./1).

³⁸ From Streetfilms' (n.d./2) testimonials page: 'Showing the [Ciclovia] Streetfilm to our Mayor was the next best thing to flying him to Bogota' (Leah Shahum, Executive Director, San Francisco Bicycle Coalition).

³⁹ See 'Portland's Bike Boulevards Become Neighborhood Greenways' (Eckerson, 2010).

is the power to pressurise people into behaving in a particular way, such as for example, 'to convince actors in one city that their place is commensurate with another to the extent that policies formulated and implemented elsewhere might also work at home' (McCann, 2011: 115).

Blogging that positions local policies against global best practice as oppositional forces generates pressure to raise local standards. The less local policies align with global best practice, the more pressure can be generated, the easier local policies can be criticised⁴¹ and the harder it becomes - in theory - to dismiss their alternatives. A good example of all of this comes from New York blogger Adam who explained his strategy of juxtaposing statements made by New York city officials and those elsewhere in such a way as to position their respective policy logic in opposition to one another and to suggest that those elsewhere have higher standards. In this case, London is used to pressurise, elevate and hold New York⁴² accountable:

[the former NYCDOT Commissioner, Iris Weinshall] always used to say things like 'my job is to keep the traffic moving' and [in my blog posts] I would try to juxtapose a statement like that against [London Assembly Member and former Deputy Mayor] Nicky Gavron [...] saying things like [...] 'our job is to move people, not move vehicles, and to make our streets as efficient as possible and to reduce the[ir] carbon footprint [...]', they had this whole list of amazing objectives for what their streets could do, so yeah, just like making the city agency accountable, giving a public forum to the stuff that this agency was saying and doing was a really really important part of the blog and absolutely opened up New York City DOT [like never] before

Illustrating again the extent to which policy knowledge is networked, mobile and part of 'back-and-forth teaching and learning process[es]' (McCann, 2011: 108) and *not* uni-directional, bloggers James and Daniel use New York and other American cities to apply pressure on *London* policy-makers, because to suggest that there are places in the United States with better cycling policy than London/the UK is, they suggest, really saying something:⁴³

we can point to them and say '[even] North Americans are building proper bicycle infrastructure and taking it seriously' (James)

^{40 &#}x27;Campaigning for cycling infrastructure in North America has been going much quicker because we can read about and see pictures and videos of innovations in Europe and tell our politicians that we want it too' (blog commenter Clark in Vancouver in Dunckley, 2013).

⁴¹ For example: 'the [UK] Department for Transport guidelines for cyclists [...] are about 20 years out of date [...] if someone in Holland or Copenhagen were to look at them, they would fall about laughing' (London blogger Matthew).

⁴² See also, for example: 'Imagine, for a second, if any of New York's crop of mayoral contenders stood up for transit riders like [Boris Johnson]' (Miller, 2013a). And conversely, 'What Boris Johnson could learn from New York about cycling and walking on city streets' (Hill, 2013b).

⁴³ See also for example Hinchcliffe (2014) on a particular transport policy 'that even the Americans can see is better'.

another useful argument [is] that even in the very pro-car culture of the United States, there are isolated places where they've adopted different policies and where, surprise surprise, they've had the same effect as they had in Holland [...] so that's very useful to counter arguments [...] it's useful to have one or two places in the United States that have better policies (Daniel)

Section Summary: Blogging and the Mobilities of Policy Knowledge

these bloggers are saying 'why don't we look at what's been done [elsewhere]?' (European campaigner Jacob)

Policy mobility is said to occur 'through a communications and information framework' (Wolman and Page, 2002: 477; Freeman, 2012) - a claim evidence in this final section supports. However whilst the framework Wolman and Page (2002) implicitly refer to is that of policy 'officials', here blogging is shown to transform ordinary citizens into policy actors who *unofficially* mobilise policy knowledge in five ways: 1) policy tourism and counteracting policy immobilities 2) legitimating policy knowledge 3) supplying policy knowledge and fuelling imaginative and reflexive mobilities 4) visualising policy 5) leveraging policy.

Collectively, these practices may be understood as a cognitive response to personal experiences with transport, as well as with expert systems responsible for it. They demonstrate how policy mobilities are made possible through interconnecting physical, virtual, imaginative and communicative mobilities, which in term demonstrate that, just because policy actors may appear to be 'socially and spatially isolated' (because they are separated geographically or from expert systems) does not mean they actually are (McCann, 2011: 119; Urry, 2000 and 2002a). Moreover, the evidence discussed here provides insight into the processes of supply and demand, and teaching and learning, that constitute blogging's lines of policy movement, as well as some of the skills bloggers develop and tactics they use as policy actors whose understandings of transport clearly go beyond experiential knowledge acquired through physical movement (see section 2.3).

6.4 Chapter Conclusions: Blogging and the Production and Mobilisation of Policy Knowledge

there is an educational process going on [...] maybe it's just the fact that information is disseminating more regularly than it was, that makes a difference (London campaigner Mark)

I look at these things more as cross-fertilisation and think that the ability to exchange ideas and perspectives always has the potential to lead to something bigger (New York blogger Sara)

The two main conclusions to draw from this chapter are: 1) blogging *produces* knowledge about cycling-related transport policy via the cognition, communication and cooperation of its users 2) blogging *mobilises* policy knowledge in ways that collectively may be interpreted as a cognitive response to individual experiences with transport and expert systems responsible for it. As such, blogging reflects more macro-level processes at work in late modernity, including individualisation, the undermining of expert systems and the de-monopolisation of their hold on knowledge (Beck et al, 2003; see previous section). As Beck and colleagues (2003) suggest, space is opened-up for so-called alternative claims to knowledge - 'extra-scientific factors' - which, devalued in first modernity, are re-valued in second, aided by internet technologies and the recognition that pure science 'is not enough' (Collins and Evans, 2002: 6). Claims to knowledge and opportunities for engagement with it multiply, as do the actors entering previously-more-confined territory via the opening of knowledge boundaries. As such, 'collaborative knowledge management is now emerging as a key challenge to the traditional guardian authorities of knowledge' (Bruns, 2007: 1), with the logical next question being *what effects do blogging about cycling-related transport policy have on this project's three expert systems*?

Chapter 7: New Order: Interaction, Adaptation and the Making of Difference

Whereas the previous two chapters focus mostly on blogging as a response to expert systems on which the public relies, this chapter is more concerned with the reliance of expert systems on the public's trust - how do they respond to blogging? Little is known about the reception of policy blogs. Who is paying attention and who 'actively interacts with them'? (Coleman and Wright, 2008: 4). Do expert systems? It is not clear, McKenna (2007: 225) argues, whether policy bloggers have 'received sufficient notice' by, and had 'enough contact' with, representatives of expert systems to be making any difference, and thus, along with Coleman and Wright (2008), suggests more research on the matter. Knowledge about *influence*, including the influence of blogging and other computer-mediated communication, remains 'tentative'; 'there are still many gaps in our understanding' (Dwyer, 2012: 550), particularly in relation to 'hard to measure' activities such as knowledge uptake, lobbying and advocacy (Tsui and Lucas, 2013).

In this chapter I consider influence in terms of *making a difference*, which, as defined by Isin (2009: 379; see section 5.1), captures both the overarching notion of *no longer the same*, as well as some of the more intricate interaction and unforeseen re-ordering of elements that constitute complex system change:

We make a difference when we break routines, understandings and practices [...] the order of things will no longer be the way it was [...] to act is to make a difference [...] To act is to actualize a rupture in the given

In this view, the question becomes whether critically blogging about cycling-related transport policy introduces a *break* or *rupture* in institutional routines, understandings and practices. Put a slightly different way, *institutional turbulence* emerges, Beck and colleagues (2003) argue, from public discourse that increasingly is risk-related as individuals reflect on the broken but impossible promises of first modernity, hence endangering the legitimacy of the expert systems responsible for making or claiming to uphold those promises. Sources of public discourse meanwhile may be accepted, legitimised and absorbed by institutional routines, understandings and practices, or dismissed, discredited and met with defence and attempts to 'restore the authority of the old boundaries', or, a combination of these and lesser extremes (Beck et al, 2003: 20). However handled, turbulence, breaks or ruptures signify *difference* or the emergent re-ordering of system elements due to their chaotic interaction.

This chapter is split into three sections corresponding to each of the three expert systems discussed in Chapters 4 and 5, asking whether blogging about cycling-related transport policy

makes a difference to the state, media and cycling's civil society, and if so, how and to what extent?

7.1 Blogging Making a Difference to the State

Having established in section 5.1 that some individuals blog in order to make noise and attract the attention of city officials (and because they cannot rely on state-instituted citizenship to do so), this section begins by presenting evidence of city officials paying attention to blogs. From there, it asks what do officials do with that awareness? What can they expect from the blogs they are paying attention to? That is, does their interaction with blogging - itself suggestive of difference - lead to difference at other levels, and how do bloggers operate to ensure that it does? The remaining sections argue that blogs hold the state accountable by acting as watchdogs, challenging official knowledge claims, undermining its legitimacy and revealing a constituency, all of which pressurise the state to adapt and/or defend itself.

The State Paying Attention to and Interacting with Blogs

just because lots of people look at something doesn't necessarily mean that it's influencing people [but] I think the key thing there is 'in space no one can hear you scream', if you've got a blog, and you're saying the right thing and you're shouting about it but nobody's reading it, well then you might as well not say it at all (London blogger Matthew)

It will be recalled from section 5.1 that some blog in order to overcome the perceived ineffectiveness of state-instituted citizenship on which they rely to make noise, be heard and represented. But are blogs the 'sophisticated listening posts¹ of modern democracy', part of a 'new politics of listening' as Coleman (2005: 274) suggests? Is the state paying any attention? All of the city officials I spoke with are. At the minimum, this includes two London officials who did, but no longer, pay attention, partially because their involvement with particular cycling-related projects ended, thus suggesting the apparent value of blogging on a policy-to-policy basis (see also Annabelle's comment below). Other participants pay closer attention. London city official Samantha and her colleagues 'are aware' of blogs critical of their employer, and she not only recounted a long list of those that she follows, but also had to hand the mobile phone number of a particular blogger, with whom she apparently interacts. Also in London, Annabelle and Elisabeth, as well as Nathan in New York - a mixture of policy and communications professionals working for local government - stated:

¹ Like 'listening posts', New York campaigner Claire spoke of blogs as 'sounding boards': '[Streetsblog] serves as a sounding board for policy makers, for politicians, for community members that are looking how to get more engaged in their civic institutions, I think their involvement in the changes that happen in New York can't be overlooked'.

the blogs are obviously useful for communication [...] Cyclists in the City is an interesting one, and I do look at it, but normally when I've been sent it by the press office [...] I've read Crap Cycling in Waltham Forest occasionally as well, that always entertains me [...] not just me, but engineers working on projects have been reading cycling blogs, you know, these are not cycling people, these are designers or engineers or whatever [...] and probably increasingly because of the political dimension, senior managers are reading extracts of things as well (Annabelle)

I continuously monitor the Cyclists in the City blog, Andreas' blog, Mark Bikes London, Bike-minded, you know, the good, the bad, the neutral [...] I find them really really helpful as a dipstick to what the feeling is out on the street [...] the comments on blogs are really fascinating [...] [paying attention to blogs] makes us more effective at work, I think it makes me a better [job title] to understand the live issues and because [...] every week the atmosphere around cycling is different (Elisabeth)

our press desk keeps an eye on [Streetsblog], and I am keeping an eye on what's going on in social media [...] you notice if there's a Streetsblog story without even having to do anything, it just comes up [...] as a government agency, I mean, we're paying attention, we notice what Brooklyn Spoke and Streetsblog are doing (Nathan)

Whilst each of these individuals is evidently paying attention to blogs, their comments raise additional questions about their motivations for doing so. Annabelle speaks of her technical colleagues' seemingly project or policy-based motivations, as well as the political ones of senior managers. However, hers and Nathan's references to press desks (where information is managed and controlled), as well as him 'keeping an eye' on the blogs and Elisabeth 'monitoring' them, all hint at more self/system- (rather than citizen-) serving purposes (Fuchs, 2008). Moreover, Nathan's reference to the apparent ubiquity of Streetsblog suggests that even if he and his colleagues were not actively paying attention to it, they could not help but be passively aware.

Other evidence of officials paying attention to blogs comes from bloggers themselves, and may be understood in broadly two ways: face-to-face interaction and digital traces. Firstly, some bloggers have been told in so many words by city officials that they are aware of their blog. New Yorker Darren, for example, knows that some of his posts have been read by DOT officials, including former Commissioner Sadik-Khan ('someone at DOT told me as much'), as well as a director who recognised Darren at an event (notably, where they were both invited to make presentations) by stating, 'oh yeah, you wrote that something'. Similarly, blogger Nick in New York described his experience of attending events where he will be

talking to a DOT person and they'll say 'yes I know who you are', we know that one thing that happens a lot is staff of government agencies will print out all of the relevant news clips for higher up

people, so one member of the City Planning Commission [...] said 'every time you write about [us], we get it in a packet, I definitely know who you are because most people don't write about us that often, but you do' [see next on accountability and 'watchblogging']

Secondly, bloggers referred to data collected by their blogging software that may reveal a reader's employer depending on the network configuration and whether the blog is accessed from the reader's workplace (i.e. if their employer's internet protocol address or domain name is identified as such):

in your traffic logs, you can get some sense of who's reading [...] city hall and city government agencies [...] from the beginning [...] we had NYC.gov, MTA.gov [Metropolitan Transportation Authority], you could see all this network traffic coming from city government [...] they would comment and often leave their email addresses where I could see it 'wow, look, that's someone pretty high up in city government that's leaving that semi-anonymous comment [...] [or] that's someone in the public health realm leaving a comment' (New York blogger Adam)

people from TfL actually comment on the blog, you only notice that when you are [...] looking further into a comment and it will list their email address as @tfl (London blogger Andrew)

Readers' identities as city officials also emerge as they pay attention to blogs via Twitter (see section 6.1). New York's Deputy Mayor for Communications, for example, follows blogger Darren on Twitter where they 'interact frequently', thus suggesting an active level of engagement.² The same official also tweeted a photo minutes after Brad blogged it - 'direct evidence' of his readership, as Brad put it. Finally, although not strictly 'digital traces', there are other 'echoes' of city officials paying attention, according to New York blogger Mike:

the DOT tend not to call up and say 'hey, great article, really learned a lot', but you do see echoes of things, so during the bike backlash [...] you could see our coverage, and then eventually the statements coming out of the mayor's office, and you could see that they were picking up on the points that we were making in reiterating them

The reason for starting this section (as well as the subsequent two) with the notion of *paying* attention is because it is fundamental; any additional evidence of blogging making a difference to the state would be secondary by comparison. That is, whilst evidence of difference may exist that does not entail officials paying direct attention (such as if blogging were to make a difference to others, who in turn make a difference to the state), the fact that they do pay attention forms the

² Darren's references to director-, deputy- and commissioner-level engagement, as well as Annabelle's to engineers, planners and senior managers, indicate that attention to blogging is not only being paid at the front lines so to speak (e.g. press desks) but also within the upper echelons of city government.

necessary interactional foundation on which other opportunities for making a difference rest. By paying attention, these officials indicate that blogging is worth paying attention to. And although none of the accounts presented above are evidently turbulent per se, as with any instance of interaction, they do indicate 'structural changes in the receiving system' (Fuchs and Hofkirchner, 2005: 247); things are no longer the same.

Blogging as previously external (and therefore new or different) is internalised as it interacts with the state system, in turn reinforcing existing patterns and/or resulting in the emergence of new ones, the outcome of which cannot be known in advance (Urry, 2002b and 2005). In other words, the state is shown to establish a relationship to blogging as 'an external difference', and in doing so, to make a difference to itself (Fuchs and Hofkirchner, 2005: 243). In the not-too-distant past these officials would not have been preoccupied in exactly this way, and hence the emergence of the blogging medium, its actual and even potential use have, at this basic level, made a difference: 'the order of things will no longer be the way it was' (Isin, 2009: 379); 'the difference in the environment does make a difference to the system' (Fuchs and Hofkirchner, 2005: 243).

Holding the State Accountable: Watchblogging

Whilst city officials are evidently keeping an eye on bloggers, bloggers are watching the state. 'The way people act when they are and aren't being watched is so different [...] it's totally fundamental' (New York blogger Nick), and some participants (particularly in New York) conscious of that effect, argued that through persistent scrutiny, blogging makes a difference by holding the state more accountable:

if we did not exist, the agencies that we [blog] about [...] can't screw up in a big way, but it has to be a certain level of person for it to ever to end up in a mainstream paper because they have to talk about *everything*, but we'll talk about *anything* the Department of Transportation does or *anything* the Department of City Planning does, so it means they really have to be much better at their detail work [...] it's not Watergate, it's in the budget document but they don't want anyone to know [...] a little sunshine can go a very long way [...] most of what we are doing is stuff that is publicly available [...] it's stuff that the government is putting out there, and even so, the need to shine the spotlight on it is so important [...] you worry about the *New York Times* when it comes to the really big scams [...] but for the day in day out [...] that's the kind of accountability we provide, which is very different but equally important (New York blogger Nick)

we follow up on issues, we're dogged and determined and [...] that really makes a difference because whether it's politicians or somebody at the DOT [...], with the exception of giant scandals [...], if you can get through one news cycle, people just kind of forget about the issue and it goes

away, and so the fact that we don't forget [...], we don't go away, really changes that dynamic [...] it's a slow persistent effort that really makes the difference (New York blogger Mike)

A desire to overcome the perceived limitations of instituted media - the traditional government watchdog - is, it will be recalled from section 4.2, a reason for some to blog. One perceived consequence of those limitations is, as Nick suggests, the inability of instituted media to keep a dedicated eye on overwhelming amounts of information, which can disguise important details just as the unavailability of information can. The shift from industrial to informational age media expands the opportunities available for those keen to make a difference in this regard, including bloggers and the readers with whom they cooperate, who are reliant on instituted media to expose the 'really big scams', but are also prepared and positioned to take personal responsibility not to let the small ones fall through the cracks. As such, New York blogger Adam described how Streetsblog exposed what would have otherwise been a lesser-known incident:

one of the first great posts [...] on Streetsblog was this letter from [...] the at-the-time Bike Program Director [...] he quit because he was just so frustrated [with the leadership of the DOT] [...] and he wrote this, you know, burn-down-the-house resignation letter, that was probably emailed [...] to Streetsblog and again, the *New York Times* would never have published it [...] but all of a sudden, this media outlet exists [...] it really forced the agency to be open in a way that wasn't possible before³

What the experiences of Adam, Mike and Nick demonstrate to city officials paying attention is the emergence of blogging as a *second order risk* of sorts, used by a distrusting public to survey the behaviour of the state as one of the systems responsible for mitigating what becomes distinguishable as the *first order* social and environmental risks emanating from modern - namely, auto - mobility (Beck et al, 2003). That is, as individuals critically reflect on mobility and seek out information to help them mitigate risk and make better decisions for themselves, they generate a critical public discourse capable of causing turbulence and endangering claims to institutional legitimacy (Beck et al, 2003; Beckmann, 2001b; Ekberg, 2007; see section 5.4 and Chapter 6). To focus exclusively on the 'risk potential of industrial society' would therefore be to miss the point: 'risks are not only a matter of unintended consequences [...] but also of the unintended consequences of unintended consequences in the institutions' (Beck in Adam et al, 2000: 222). And whilst such *politicisation of risk* has been 'a central problem for modern society since the 1960s' (Beck et al, 2003: 14; Beck, 2008b), the situation has since been further complicated by internet technologies, which mean that information consumers are less or 'no longer passive' (Bruns, 2007: 5). Having thus established the emergence of this particular system of mutual

³ See 'Outgoing Bike Program Director Rips Agency Bosses' (Naparstek, 2006a).

surveillance, I will now take a closer look at what happens when bloggers publish feedback based on their observations.

Blogging as System Feedback and Countering Official Knowledge Claims

As bloggers keep an eye on the state, they may find reasons to fault its claims to knowledge and to feed back counterclaims of their own, resulting in the state's public undermining and at times, the adaptation of institutional practices and/or knowledge claims. It is in this context that the New York Department of City Planning is understood to have amended its draft parking reform study, which blogger Nick discredited as

just junk, it was a draft, but it was just... I, as a non-expert statistician, could be like 'I see what you did there to jig those stats, that is fundamentally dishonest', and we put up a big post⁴ saying 'they reached the conclusion they wanted to by doing bad math, and here's what it looked like', and in the final version,⁵ literally each one of the mistakes or dishonesties that we pointed to was fixed and the conclusion was different [...] I don't know the bureaucratic story behind that [...] but it was striking that it was point for point fixed, there were things we said like 'what if you look at this number instead' and they looked at that number instead

Danny

Drawing attention to official statistics and the conclusions they help support has become a trademark of sorts of Danny (Williams, n.d.) in London who blogs at Cyclists in the City ever since he claimed⁶ - based on Transport for London's own data - that 'more bicycles than cars will cross central London's bridges' during peak travel every morning, and therefore calling into question the legitimacy of existing road design, its distribution of space and risk and the extent to which it represents users equally (Williams, 2011a; 2011d). As London blogger Daniel put it:

you get disputes like [...] what is the *actual* level of traffic on Blackfriars Bridge, and TfL has its figures for modal share and some of the bloggers produce quite different figures and then you have to tease out where, why the differences

Danny's approach may be described as a concerted use of resources, combining blogging with the assertion of his right to request official information via the UK's Freedom of Information Act, thereby *enhancing* state-instituted and uninstituted forms of citizenship each with the other (see

⁴ See 'Promising Parking Reforms Brewing Inside Department of City Planning' (Kazis, 2011).

⁵ See 'DCP Advances Promising Manhattan Parking Reforms, Fixes Flawed Study' (Kazis, 2012).

⁶ Although Danny originated this claim, judging by the dialogue between him and his reader commenters (see Williams, 2011a), together they co-refined it (see section 6.2 on blogging and cooperation).

section 5.1). Based on data obtained via a FOI request, Danny revealed why he and Transport for London reached different conclusions regarding traffic flow on Blackfriars Bridge: TfL 'defines one cycle as only 20% of a car' and thus not does count drivers and cyclists 'as equal', leading him to conclude that TfL's 'traffic models are killing people' (Williams, 2011i). More important here than the expert rationale underlying the 20% figure, is Danny's awareness, publication, distrust and delegitimisation of it; knowledge that previously was contained leaks, is interpreted out of its original context and used to discredit its source. This is a clear example of how social knowledge is not isolated from its subjects; the continual influx of knowledge about social life dynamically alters it; scientific knowledge rejoins, feeds back and thus reorders its subject matter, which in turn questions the knowledge's legitimacy (Giddens, 1991a). The perceived significance of Danny's claims (for civil society, the blogosphere, the pool of knowledge, institutional legitimacy and the trust dependent relationship between the public and the state) were described by London blogger Andrew:

it's been revealed recently [by Cyclists in the City] how backwards the thinking of Transport for London is, I think there's more and more anger [...] there's actually more cyclists going over [Blackfriars] bridge than there is cars unless you're interpreting the statistics in TfL's crazy manner [...] he's very much on top of the process that goes on within TfL [...] calling up TfL and saying 'what's this? can you answer this question?' [...] breaking into their systems and understanding their little world [...] he's revealed these various really interesting but strange things [...] such as TfL counts a cyclist as a fifth of a car [...] these statistics have become now common knowledge within the cycling community because they've permeated through the blogs from this one person that's made this discovery, and I think everyone with an interest in cycle campaigning and changing London for the better follows this blog and it's interesting to see how his one discovery has now become very much a common knowledge⁷ [...] before, that knowledge never really existed because no one really bothered to try and break into TfL [...] before the message was more 'this is what should be done' and less 'let's analyse what they're doing, why they're doing it and who we need to talk to to change things [...] it's good to finally see someone actually break in, analyse things [...] actually reveal TfL's plans before they come into fruition [...] he's broken into it, and it's fantastic really [...] I've got a lot of respect for him

Andrew's remarks attest to the capacity of blogging - or indeed, even just a blog - to 'break into' an institution or expert system. His comment is evidence of the risk blogging can pose to the legitimacy of the state and other expert systems, as Danny's efforts and the public discourse surrounding them have generated 'more anger' and clearly informed Andrew's perceptions of 'crazy' official knowledge and the insufficiently demanding 'this is what should be done' approach common of cycling's civil society (see section 5.3). The perceived effectiveness of Danny's

⁷ See for example (Beard, 2013) on how Danny's claim makes its way into mainstream media.

blogging by way of contrast (further) undermines instituted means of making a difference; he undermines the state not only by *what* he has revealed but *how* he has revealed it:

people might have spotted 'oh look, there's a plan in consultation' and comment on it but the city would have ignored the comments [see section 5.1] [...] people would have complained about it and pointed out how rubbish it is but there wouldn't have been the momentum to actually do things about it [...] Danny deserves massive credit (London blogger James)

'The Blackfriars issue' with which Danny is associated, is moreover what city official Elisabeth attributed to making her colleagues 'sit up and listen' to blogs. Blogger Chris suspected as much:

Cyclists in the City is really making an impact, there's no question [...] the Blackfriars thing is really... it's there as a raw nerve and he's keeping prodding it [...] in TfL, I think that people will be acutely aware at the moment of Cyclists in the City blog and equally certainly the opposition politicians, they all know [...] they are for sure connected in, which therefore means that Boris [the mayor of London], in one way or another has to be

Indeed Danny has since been invited to serve as a member of the mayor of London's Roads Task Force, comprised of 'individuals who represent the key road user interests and/or have expertise or experience that can help advise the Mayor and TfL' (GLA, 2012). The appointment is clearly a testament to - legitimisation of - Danny's blogging, knowledge and positioning as a policy actor. Judging from the list of other task force members (see Figure 3) his appointment would seem also to signify something of a break in the practice of consulting the public *separately* from institutional stakeholders to obtain knowledge about 'what the represented need, want and value' (Coleman, 2005: 275). Of course, the appointment also means that Danny has become a cog of the system...

Road Task Force Members

Name	Title	Organisation
Steve Agg	Chief Executive	Chartered Institute of Logistics and Transport
Tony Armstrong	Chief Executive	Living Streets
Stephen Bagge	Business Development Executive	IBM
John Burch	Deputy Director, Operations	Confederation of Passenger Transport UK
Martin Brown	Director of London Region Operations for DHL Express	DHL
Patrick Clarke	Network Operations Director	UK Power Networks
German Dector-Vega	London Director	Sustrans
Robert Gifford	Executive Director	Parliamentary Advisory Council for Transport Safety (PACTS)
Prof. Peter Jones	Professor of Transport and Sustainable Development	University College London
David Leibling	Vice-Chair	London TravelWatch
Edmund King	President	The Automobile Association
David Leam	Director of Infrastructure	London First
Nick Lester	Corporate Director, Services	London Councils
Dr Leon Mannings	Transport Policy Advisor	Motorcycle Action Group (MAG)
Dr. Alice Maynard	Director	Future Inclusion
Miles Price	Planning and Transport Executive	British Land
David Quarmby CBE	Chairman	Royal Automobile Cab (RAC)
Jon Rouse	Chief Executive	Croydon Council
Oliver Schick	Chair of Policy Committee	London Cycling Campaign
Iain Simmons	Local Transportation Planning Manager	City of London
Jim Walker	CEO	Walk England
Danny Williams	Blogger	Cyclists in the City
Isabel Dedring	Deputy Mayor for Transport	Greater London Authority (GLA)
Leon Daniels	Managing Director, Surface Transport	Transport for London
Michèle Dix	Managing Director, Planning	Transport for London
Garrett Emmerson	Chief Operating Officer, London Streets	Transport for London
Ben Plowden	Director, Surface Planning	Transport for London

Figure 3: Members of the mayor of London's Roads Task Force, including blogger Danny Williams (GLA, 2012)

Road Danger and Cycling Safety

Another way that blogging in London is understood to have made a difference to the state and its official claims to knowledge relates specifically to the issue of road danger and cycling safety. Bloggers are recognised as publicly undermining the city's road safety record, to the extent of being 'a thorn in the side of the Boris Johnson administration' and prompting the review of 500 junctions, the Cycle Superhighways⁸ and a shift in policy towards 'safe, segregated cycle lanes' (Edwards, 2012a and 2013). Two years after the blogger-organised Tour du Danger of London's '10 most dangerous junctions for cyclists' (see section 4.4), the city announced that 33 of the city's 'biggest and nastiest road junctions will be transformed [...] to make them safer and less threatening for cyclists and pedestrians' (GLA, 2014). The city's latest cycling strategy meanwhile claims to 'favour segregation' (GLA, 2013: 12), and is thought to reflect 'the power of bloggers in mobilising opinion and changing the political landscape', not to mention possibly be 'the first transport policy moulded by bloggers', according to the BBC's London Transport Correspondent (Edwards, 2013). 10

Although this project's London fieldwork pre-dates the above policy contexts, participants there had already recognised the state's apparent willingness to adapt as a consequence of blogging's emphasis on: road danger; the state's mishandling of road danger; the fallibility of claims supportive of integrationism; and segregationism as a preferred strategy for mitigating risk:

much of the current anguish and protest among London cyclists about rising fatalities [...] has had, it seems to me, direct policy responses... following the death [of a cyclist] at King's Cross [...] there's been a huge [...] blog-based focus on how treacherous the junction is for cyclists, and now Transport for London have promised to look at it again (London journalist Paul)

[the blogger-organised Tour du Danger] [see section 4.4] has rattled cages at Transport for London, to which my response is 'good', because they needed rattling and people have come forward asking 'what do we need to do?' from that organisation [...] anonymously they've said 'what do we need to do? how can I help frame the debate?' (London blogger Matthew)

Through a combination of different approaches (obtaining, analysing and blogging critically about official information, physically protesting) and types of citizenship, the bloggers cited above have,

⁸ See blogger Dunckley (2013) on 'the first signs of the TfL supertanker turning', as evidenced by its redesigns of the Superhighways.

⁹ Incidentally, when asked whether she knew about the blogger-led Tour du Danger, city official Elisabeth replied '[laughter] of course I do'.

¹⁰ See also blogger Arditti (2013c) who describes the contents of this strategy: 'It's almost as if Boris had been reading the [...] blogs [...] Yes, he has definitely been reading [those] blogs. And it seems that Peter Hendy, head of TfL, has been doing likewise'.

each in their own way, contributed to the public undermining of official knowledge claims by countering them with claims of their own. Rather than passive consumers of information, these individuals are actively *feeding back*,¹¹ and it is through feedback that various system interactions and iterations are encouraged and/or discouraged, and 'system dis-equilibrium and change is produced' (Lash, 2001: viii; Bruns, 2007).

Blogging as Revealing a Constituency

It could be said that the focus of discussion has until now largely been discontent and disapproval—what those engaged with blogging do *not* want or value from the state and transport policy. This however neglects the point that blogging also reveals what those individuals *do* want; it reveals a constituency to evidently attentive city officials; just as blogging is a risk, it is also an opportunity (to re-gain lost trust and 'get a sense of what advocates are asking for', New York campaigner Caroline). After all, not all policy areas have such a 'politically-engaged constituency' or 'loud media voice' (New York blogger Nick). That is, by revealing a constituency, blogging also reveals a political opportunity not currently being met, for example, by the 'Brooklyn borough clown president [see section 4.1], who is like 'my constituency drives cars and these bike lanes are just annoying" (New York blogger Martin). The context of that remark - the construction of the controversial Prospect Park West bike lane (see section 4.1 and 5.2) - also underlies New York blogger Brad's statement below, in which he suggests that blogging makes a difference by demonstrating the *support* city officials who implement such policies can expect to receive:

[Streetsblog was] the outlet where it was plainly visible that there was a constituency that supported the changes [to Prospect Park West], that wasn't really coming across anywhere else, so just the fact that the mayor's people could see that yes, there are lots of people who think that this is good and most of the people in the neighbourhood support what the city has done here, that was a very specific role that [Streetsblog] fulfilled

Another way that blogging helps to reveal a constituency is by engaging that constituency in state-instituted citizenship (which in turn is *enhanced*, see section 5.1). For example, it will be recalled from section 6.2 that New York blogger Adam received a tip-off from a city official with access to a 'secret' traffic plan, resulting in the unveiling of that information via the co-production of online content, as well as a record turnout at a local community board meeting to discuss the proposal:

in the past you would have had - even if the thing was controversial - you would have had 50 people at the meeting tops, we had more than 700 [...] I mean 700 people for a neighbourhood issue? [...] it

¹¹ Indeed, system feedback is said to pass 'through the individual' in second modernity as their status is elevated: 'Individualization now is at the same time system destabilization' (Lash, 2001: viii).

was really an example [...] of the power of the blog to [...] get information to the public that would otherwise be kept under wraps, and then frame the issue, and then mobilise people, and it was like nothing I'd really ever seen before

The more individuals collectively making noise, in theory, the more difficult they are to be ignored and the more likely to be heard and represented. Indeed the BCC's London Transport Correspondent argues that because of bloggers, 'the voice of cyclists is now very difficult for [...] London's mayor to ignore' (Edwards, 2012a), whilst campaigner Rosemary has observed a shift in routine government practices as individuals take to blogging and other social media to express their needs, wants and values in relation to transport:

previously the government has just completely ignored [a particular transport issue], they wouldn't go and talk to BBC [...] [or] other people to defend their position [...] they wouldn't have previously bothered, it just wouldn't have been seen as an issue, so clearly we can see that we're having an impact [by using social media], and that they're now feeling like it is an issue [...] the more people talking about your subject, whether that's cycling [...] or whatever, more people in more media outlets is the way forward

The kind of *accountability* Rosemary alludes to as a difference that blogging makes is reiterated in the following statement by London city official Elisabeth:

we've got unprecedented access to the thoughts of so many individuals [...] it adds another completely different dimension and has certainly I think helped improve the accountability of what the mayor and Transport for London are ultimately doing to improve conditions for cyclists, even if there hasn't been really significant action yet, there is so much going on internally at TfL to look at how they operate and how they deliver for [...] cyclists, that it has made a difference

Although the constituency blogging reveals is not new per se (there have long been those concerned about cycling-related transport policy), it is *emergent* in the sense that its individual actors and knowledge claims are more interactive, (digitally) traceable and therefore arguably less latent than in the past (Beck et al, 2003).

¹² See blogger Dunckley (2013) on mayoral candidates 'feeling the need' to publicly debate segregationism and to pledge their support of it... because of blogging.

Blogging and the State's Public Relations Strategies

In London¹³, the state's public relations strategies have been adapted to incorporate blogging that is critical of cycling-related transport policy. Public relations is about managing reputation, 'with the aim of earning understanding and support and influencing opinion and behaviour' (CIPR, n.d.). Its importance is heightened amidst the contexts of increased information, information movement and uncontrollability, and 'one of the 'public relations' problems' facing expert system representatives is public distrust associated with widespread awareness of risk and the inability of experts to reliably deal with it (Giddens, 1991a: 130; Rainie and Wellman, 2012).

The prevention of institutional turbulence (i.e. the mitigation of blogging as a risk) and/or the opportunity to listen to and represent the public (i.e. the exploitation of blogging as an opportunity) are possible reasons for city officials to pay attention to blogs. As such, London city officials - a mixture of engineering, communications and policy professionals - described paying attention to blogs as 'a way of simplified market research' (George); 'an early warning system' (Samantha); 'forewarned is forearmed' (Robert); and a means of conducting 'a horizon scan, to see what major issues might be coming up in the future, to anticipate what questions might be asked of the mayor' (Elisabeth). Samantha and Annabelle (also in London) spelled out just what is at stake, with Samantha describing the department in which she works as:

the crunch point reputationally for the organisation [...] so if an issue boils over into the media [...] that's a problem, and as far as I'm concerned the media includes some [...] blogs, because those blogs are also read by journalists [see next section] and something that's in a blog one morning could be about to hit the *Telegraph*

[blogging] is probably influencing City Hall more than any one else because they're at the political front line [...] Boris's reputation as regards to cycling is really, really important so they would be thinking about what they can do [...] and his advisors would be very sensitive to criticism (Annabelle)

How city officials respond to blogs varies, as Annabelle, choosing her words carefully, went on to explain:

the press office look at them all so they'll flag things to me if there's... [...] they'll send a link because they'll know that... and that will then... I mean, we've always been to a degree responsive to what is said about [us] in the press, like any large organisation, we have a reputation to defend and also we have to make sure that the truth is out there [...] we've always monitored what is being written and I

¹³ The issue of PR did not surface amongst participants in New York, with the exception of blogger Darren: 'outside of Streetsblog, there aren't too many new media types who are also being invited to this stuff, the DOT does not necessarily stage a press conference and say 'oh let's invite BrooklynSpoke and let's invite BikeBlogNYC'.

guess it's just an extension of that and sometimes you need to ignore ¹⁴ it, sometimes you need to react to it in some way whether that be through putting other information into the public domain or just being aware that it's a potential issue that we need to be aware of, think about whether it needs to influence what we're doing

As Annabelle suggests, one strategy that officials use 'to mitigate people's perceptions of something' (Samantha) is to disseminate information that justifies their actions and counters claims made by bloggers, and to convince bloggers of its merit, including for their readers. For example, London's cycle superhighways (and to a lesser extent bike hire scheme) (see section 4.1) were the subject of 'a lot of cynicism' and 'negative press' (Samantha), prompting officials to offer bloggers the opportunity 'to meet with the person that's responsible for cycling and road safety' (Samantha) and to attend a 'bloggers breakfast' (Elisabeth). The below accounts describe those interactions with the bloggers of Cyclists in the City, London Cyclist and Croydon Cyclist, the latter of whom was:

very, very, very, very critical of [the cycle superhighways] and so we went and spoke with him [...] we didn't entirely win him over but he could see, he saw, he understood more and [...] that helped soften what he was saying and it helped him consider more because he understood more some of the reasons behind it (Samantha)

the guy who is leading on cycle superhighways went out with the London Cyclist blogger [...] to explain them, to clear up a perception that they were slippery [...] things like that, if you take cycle hire, similar sort of things would have happened [...] managers more senior than me, actually meeting directly with those people [that] is definitely happening, and it's probably only in the last couple of years (Annabelle)

I went to meet a blogger [...] there's a cycle superhighway that's going to go over Vauxhall Bridge and he had some quite strong views [...] I went because he was so... what's the word? [...] passionately critical of what was proposed [...] he says we're going to make the lanes narrower and do this, that and the other, which wasn't factually correct [this point is revisited in section 8.4], so I thought I'm not going to meet him and he's going to end up that thinking [we're] the best thing for cyclists since sliced bread but at least I could [...] try and correct some of the facts (Robert)

Blogging has evidently been absorbed into the state's routine public relations strategies; routine public relations strategies have been adapted to incorporate blogging. However unlike the circumstances surrounding policy boosterism whereby blogging is regarded as an *opportunity* to

¹⁴ Indeed as London city official Robert told me, 'you can encourage a story to run and draw more attention to it if you comment and that's why often we won't write back to a paper', adding that going off on a tangent is what officials 'are supposed to do in a press interview, have in mind what you want to say, regardless of the questions [laughter]'.

proactively enhance the reputation of the state, here blogging is dealt with reactively as a *risk* (including possibly as a risk to the legitimacy of boosterism itself) (see sections 4.1 and 4.2).

Section Summary: Blogging Making a Difference to the State

In contrast to the perceived ineffectiveness of state-instituted citizenship discussed in section 5.1, blogging is shown here to be capable of making a difference by prompting the state to pay attention and to adapt and/or defend itself. Bloggers, as instigators of public discourse, pose a risk to the existing order and hold the state accountable by monitoring it, challenging its knowledge claims, publicly undermining its legitimacy and revealing a constituency. Ultimately, because of the state's interaction with blogging, 'the order of things will no longer be the way it was' (Isin, 2009: 379); 'the difference in the environment does make a difference to the system' (Fuchs and Hofkirchner, 2005: 243). The next section goes on to consider blogging's 'difference' in relation to instituted media.

7.2 Blogging Making a Difference to Instituted Media

'The most transformative impact of blogging is upon journalism', according to Coleman (2005: 274), and having established in section 5.2 that some blog in order to overcome instituted media's perceived shortcomings (i.e. insufficient critical coverage, limited resources, vested institutional interests), this section presents evidence of blogging making a difference to media as an expert system. It is split into two parts, beginning with a discussion about journalists paying attention to blogs, followed by the suggestion that blogging has emerged as a legitimate media actor.

Instituted Media Paying Attention to Blogs

The recognition of blogs by broadcast media is 'a necessary step' in their ability to raise awareness of and make a difference to policy: 'Receiving attention from the media increases the number of people talking [about] an issue and possibly forces political officials to take notice' (McKenna, 2007: 222). By reframing debates and creating 'focal points for the media as a whole', blogs can affect political and policy outcomes (Farrell and Drezner, 2008: 28). That is, one reason that blogs can make a difference to policy, despite their relatively small readership, is because they can make a difference to other media. Thus despite the perceived shortcomings and unreliability of instituted media (see section 5.2), bloggers are at least in part reliant on it. In other words, as a policy blogger, 'at the end of the day, you need to be a bit media savvy' (London blogger Andrew). And whilst we know from section 5.2 that bloggers pay attention to instituted media, *is there interaction*

between the two? Are 'old media talking to new media' (Andrew) about cycling-related transport policy? Participants in this research seemed to think so, based firstly on their general impressions:

I quite often see journalists linking to those blogs [...] [they] are reading them and using them to keep up-to-date (London campaigner Rosemary)

Streetsblog is read by other news outlets, I think they have entered into a media realm in New York City (New York campaigner Caroline)

Rosemary's and Caroline's observation - that journalists are paying attention - was echoed by other participants who recounted more specific examples, including their personal experiences with the press and being cited by journalists as a source. For example, London blogger Daniel:

journalists are clearly aware of the cycling blogs, Dave Hill [of] the *Guardian* is clearly aware of all of them and he does link directly to some of them or quotes them sometimes ¹⁵ [...] he mentioned my blog [...] and said something like it was well-written or authoritative [...] he's mentioned many of the others [...] and contrasted official press releases from TfL with how bloggers have presented the same situation

The last bit of Daniel's remark illustrates how the political risk that blogging poses to the state (by undermining official claims to knowledge with counter claims of its own, see previous section) may quickly be multiplied via a newspaper's wider readership and professional accreditation. Blogging's ability to hold the state accountable is also improved when journalists draw attention to and legitimise claims originating in the blogosphere, 16 such as the state lacking transparency, not making good on its promises of transport provision or responsibilities to manage road risk:

cycle bloggers have been writing [...] about how rubbish it is to cycle to the Olympic sites,¹⁷ that's now getting taken up in the mainstream press¹⁸ and everybody else is saying 'yeah, it's rubbish, we were promised eco-friendly Olympics and [yet] we've got no decent bike route' (London blogger James)

¹⁵ See for example Hill (2011a; 2011b; and notably, 2009) on blogger Freewheeler, 'usually armed with his camera to help illustrate his copious critiques of London-wide cycling policies and his local Council's environmental policies in general. No doubt many in the latter administration consider him unreasonable, unfair and perhaps ungrateful too, but I can assure him that he's got their attention. He recently ran a series of typically erudite and disrespectful posts about [their] proposed traffic improvement schemes [...] London needs more hyper-active, hyper-local bloggers like Freewheeler.'

¹⁶ Bloggers should be credited, Dunckley (2013) argues, for generating 'full-page stories exploring their campaign goals in the *Evening Standard* and national newspapers'.

¹⁷ See for example blogs posts by Storbeck (2012) and Williams (2012).

¹⁸ See for example Lydall (2012).

every once in a while Streetsblog will have a story that'll really catch fire, for example, they've been covering a lot of the police's inability to investigate deaths or serious injuries [...] somebody did a radio story [on it] [...] and it was starting to snowball, CNN¹⁹ [...] did an entire, very serious block about how cyclists were being injured and the police just can't... (New York blogger Charles)

we're trying to have a rule be 'educated, not indoctrinated' [...] reporters would not be reading if [the blog] was 'cycling is awesome, rah rah rah', that's not a valuable thing for them [...] we definitely have plenty of examples of [journalists] reading [the blog] and using it [...] we've been writing a lot about [the provision of public transport on a particular bridge], they promised [....] [but then] the new governor [...] decided to take that off, pretty much unilaterally, and there's been a lot of pushback [...] three separate of our stories were cited by the local newspaper's editorial on the topic giving us full credit, so [...] one group that we're speaking to is reporters [...] we've been cited by I think pretty much all the main New York papers [...] so there's definitely lots of dialogue back and forth there, we're critiquing them [...] and we know they read us (New York blogger Nick)

papers will kind of blatantly just redo a story, the Brooklyn paper often does that [...] an early instance of that was a story about parking placards [...] highlighting a report that had researched the dollar value of all the free parking that public employees get through these placards and so that, the *Daily News* picked up the story²⁰ [...] [also] we just got a call from the *Daily News* last week after we did a post about plans for bus improvements [...] I don't know if they've run that story but the reporter called us up and asked to talk to our guy who wrote that post (New York blogger Brad)

Brad's point that journalists may 'blatantly just re-do' stories originating in the blogosphere was echoed by blogger Andrew in London, who interprets such practices as a sign of blogging having made a difference to knowledge production practices in terms of the multiplication, interaction and re-ordering of legitimate media actors:

some of the things that I've written have now made it into magazines so it's kind of strange [...] it's almost that we've become the source [...] I even noticed one journalist literally used [one of my] sentence[s] exactly [...] as his headline for an article [...] they're obviously following that discussion and they're feeding off that for the magazines now, and I think perhaps less so we're feeding off the magazines, so the information leaders are changing (London blogger Andrew)

One conclusion to draw here is that blogging makes a difference to instituted media's coverage of cycling-related transport policy, which is understood to otherwise be insufficient and uncritical, as discussed in section 5.2. That is, blogging evidently informs journalists and the content they produce. Indeed the BBC's London Transport Correspondent suggests that bloggers have 'changed the debate' about cycling in London by, amongst other things, making a difference to the

¹⁹ See for example Gupta (2012) and Smith (2012).

²⁰ For some examples of this story see Lee (2008) and Naparstek (2006b).

way transport stories are told: otherwise untold 'stories often get into the mainstream media' now precisely because of blogging (Edwards, 2012a). Likewise, in New York, campaigner Claire notes that Streetsblog and Streetfilms being 'a part of' New York's mediascape

means that a more progressive transportation message can be out there [...] they've brought daily, regular, conversational transportation discussions into a more mainstream audience

Moreover, by interacting with blogging as 'an external difference', instituted media, as the receiving system, is shown to adapt itself and thus create conditions for new qualities to emerge in *other* systems with which it interacts (Fuchs and Hofkirchner, 2005: 243). For example, journalists who pay attention to blogs send a signal to city officials such as Samantha in London, who, when asked how she and her colleagues determine whether to pay attention to or interact in other ways with a given blog/ger, replied:

it depends on how many people are making noise [...] it depends on how high profile [the blog is] [...] if a blogger gets referenced a lot by [...] journalists, that's a good sign

That is, by demonstrating that they - as professionals in the business of mediating communication in the public interest - pay attention to blogs, journalists indicate to others that blogs are worth paying attention to. In terms of the public this means that critical coverage of cycling-related transport policy 'spreads [...] to a much wider general audience' (London blogger James) when it is broadcast; more individuals are more likely to come into contact with blogs if journalists pay attention to them; if media system elements are interacting, or their parts moving, as New York blogger Brad suggests:

the stuff we write about filters up to the larger outlets to a great enough extent that it does influence people beyond the core audience, and it takes a lot of moving parts to really make that happen

Blogging as a Legitimate Media Actor

Another way of thinking about the difference blogging makes to media as an expert system is in terms of legitimacy, and who or what is considered a *legitimate media actor*. And whilst journalists citing and paying attention to blogs (as just discussed) could be interpreted as a sign of legitimacy, this part of the section considers evidence of blogging being recognised as 1) a reliable, authoritative or expert mediator of information about cycling-related transport policy 2) a worthy disseminator of official information.

Firstly, blogging is identified as authoritative by representatives of expert systems, whilst simultaneously drawing attention to the relative shortcomings of instituted media. It is notable, for example, that Streetsbloggers, as both bloggers and critics of a hardly mainstream topic, have been positioned as information leaders when invited to appear on television and described as 'newsmakers or experts' by the *New York Times*:

I was on the CBS Morning Show [...] I think they've given up on transportation to some degree and liveable streets, it's not their... they don't know... they can't even fake knowing it, we all know it so well, so they don't... (Streetsblogger)²¹

we've appeared in the [New York] Times but it's usually [...] them writing about us as newsmakers or experts²² (Streetsblogger)

it's great to have a dedicated forum that's talking about transportation, especially pedestrian/bicycling in New York, it's a little like having a newspaper that just focuses on that issue, I mean, Streetsblog does more coverage of what DOT does than the *New York Times* (New York city official Nathan)

the curious thing about the urban cycling debate in the UK as a whole, but especially in London, is how much more thoroughly, and better, it's covered by independent blogs than by the mainstream media, this is, of course, partly that such blogs have more space and focus for cycling issues, but they're also much better informed in the main [...] cycling blogs in general are quite credible (London journalist Paul)

Secondly, blogging has been incorporated into routine practices aimed at communicating expert system information to the public. And whilst this point was also made in the previous section regarding the state's public relations practices, here it is being made specifically in relation to instituted media. That is, bloggers are recognised as necessary, reliable or approved recipients of expert system information; direct access to this information - once largely limited to instituted media - has been de-monopolised; barriers have opened. Representatives of expert systems aim for the information they produce about cycling-related transport policy to be consumed, disseminated and legitimised via blogging:

we've refreshed our press list recently, when I arrived here, there were no bloggers on the press list at all, whereas now, there are probably more bloggers than anything else (London campaigner Mark)

²¹ For reasons of anonymity, I have left out the pseudonyms of these Streetbloggers.

²² See for example *New York Times* writers (Chan, 2007); Schuessler (2008), a self-described 'devoted reader of Streetsblog'; and Powell (2012), who describes Streetsblog as 'indispensable'.

people have changed their news sources so much and you can't just work with traditional journalists and not work with people that are engaging in social media [...] I've got statements cleared and given to bloggers (London city official Samantha)

[someone from Transport for London asked me] 'can we sign you up to the press releases?²³ (London blogger Andrew)

our press desk [...] might say 'do we have this posted on the internet? because Streetsblog is asking about it and they're going to write a story about it', and I'll say 'okay, I'll make sure it's posted' (New York city official Nathan)

often I'll have journalists who are saying 'could you [help distribute] this article?' [...] they write an article and then often they'll send it to me and I'll post it through our social media channels and you'll find that through the power of the bloggers the amount of page views you can get on traditional media is massive, I think that's often a selling point (European campaigner Jacob)

Unlike the equivalent situation with the state (see previous section) whereby bloggers, as policy actors, deliberately challenge official knowledge claims, feed back counter claims of their own and generally pose a threat to institutional order (without actually governing), here legitimacy is more a matter of blogging emerging as a player *in its own right* and in broadly the same game (i.e. publicly communicating information) as instituted media. Blogs, in other words, both support instituted media, as well as draw attention to its shortcomings simply by being valued for what they generally are not:²⁴ mediators of subjective, candid, critical, regular, in-depth, uniquely-spun and alternatively-framed commentary, analysis and/or knowledge on a highly-specialised topics, such as cycling-related transport policy (see sections 3.1 and Chapter 6):

we care about this, as a ideological matter [...] we a) know what we think should happen and b) try to be strategic about making that happen [...] it's just our beat [...] we get to go in much greater detail than [journalists] are ever going to be able to [...] the *New York Times* is only going to care if it becomes a big deal for some extra reason, a bike lane [itself] isn't enough [...] we actually get to look at it more broadly and say 'no, you really need to pay attention to the whole story' [...] the media-angle is important because it's not just a story, there's a different story to be told (New York blogger Nick)

the blog really has this power to just, to cover a beat, I mean, in a way that maybe wasn't possible before for one or two journalists [...] in a world of declining newspaper budgets and local news

²³ Bloggers meanwhile may employ traditional PR techniques to draw attention to their own efforts. See for example the press release issued by bloggers Ames and Williams (Williams, 2011h, see section 4.4).

²⁴ Due to, for example, limited resources, purported objectivity and vested institutional interests (see sections 3.1 and 5.2).

going down the tubes [...] [it has] allowed me and other liveable streets advocates to frame the ideas in our perspective (New York blogger Adam)

Section Summary: Blogging Making a Difference to Instituted Media

Blogging evidently makes a difference to the mediation of communication about cycling-related transport policy, including, as this chapter demonstrates, to media's instituted actors. It accomplishes this by capturing the attention of journalists; being recognised as a legitimate media actor; and inadvertently drawing attention to the limitations of media-as-an-expert-system. Moreover, insofar as instituted media cite blogs and/or bloggers, blogging could be said to make a difference to the overall pool of information that is available to communicated, from which new collective properties and knowledge may emerge (see section 6.2). Put another way, by emerging as 'an external difference' to the media system and interacting with its elements, blogging re-orders those elements and changes the system: 'the difference in the environment does make a difference to the system' (Fuchs and Hofkirchner, 2005: 243); 'the order of things will no longer be the way it was' (Isin, 2009: 379). The next and final section of this chapter considers the extent to which blogging makes a difference to cycling's civil society.

7.3 Blogging Making a Difference to Cycling's Civil Society

It will be recalled from section 4.3 that cycling's civil society is highly disparate, in terms of different ideologies and strategic preferences about how best to advocate cycling and mitigate its risks. This is particularly the case in London, where some blog in order to overcome the campaigning establishment's perceived shortcomings (i.e. insufficiently demanding, successful, flexible, inclusive or representative, see section 5.4). This section meanwhile considers whether bloggers' efforts make a difference to civil-society-as-an-expert-system. It begins by establishing that system representatives are paying attention to blogs. From there, the section is split into two parts corresponding to each New York and London. In New York, instituted advocacy is understood to be supplemented by blogging, whilst in London, it is the subject of bloggers' criticism and is shown here to become more demanding, accountable, questioned and segregationist, whilst the very nature of advocacy becomes more interactive and individualised.

Instituted Advocacy Paying Attention to Blogs

Similar to the previous two sections, this one begins by asking whether representatives of the campaigning establishment are paying attention to blogs. That is, whilst bloggers are evidently paying attention to the work of advocacy organisations (section 5.3), does the inverse also hold

true? Are representatives of those organisations paying attention to blogs? The below accounts indicate that they are, even though, as Daniel suggests, that may not necessarily be obvious, or, according to Iris, on purpose:

it becomes clear that the traditional cycling groups are aware of [the blogs] although they may not respond directly (London blogger Daniel)

it seemed natural to start looking at the cycle blogs, they come your way, don't they? they come flying in your direction (London campaigner Iris)

quite often people link to these blogs, so whilst [a particular campaigner] might not necessarily be reading all of the blogs, if he [sends an email around to other campaigners about a given issue] [...] then sometimes somebody will reply and go 'such and such has just written [a blog post] about that and here it is', so you know, it can get captured [that way] [...] I don't know, but I would imagine [a particular campaigner] at [another organisation] also reads them [...] those blogs are quite often pinned up on lists and things other cycling stuff that I'm on (London campaigner Rosemary)

I'm interested [in the blogs] personally, but also professionally, because I want to know what people are saying, whether they're saying stuff about us [as an organisation] (London campaigner Mark)

The last bit of Mark's comment hints at his organisation's dependence on the public's trust and the potential of public discourse to cause institutional turbulence. And whilst Mark rattled off a list of blogs that he regularly follows, Rosemary and Iris suggest that even without *actively* paying attention, they cannot help but be at least *passively* aware of blogging due to the distribution of hyperlinks (via email, Twitter, websites; see section 6.1). That is, judging by their comments, blogging seems to have become absorbed or internalised by London's formal advocacy circles - a feat that is not insignificant when one recalls the difficulty experienced by some advocates in expressing their views and having them heard within those same circles²⁵ (see section 5.3). Advocates in New York are also paying attention, but because their comments tend to be more specific, they are discussed separately.

New York: Blogging Making a Difference to Advocacy by Mooring and Mobilising Information

In New York, Streetsblog and Streetfilms are recognised for *supplementing* routine advocacy practices in two interrelated ways: 1) as bodies of evidence or repositories of knowledge 2) as mediators of communication about that evidence or knowledge. In other words, it is through *storing*

²⁵ Blogging has 'allowed a space for the expression of ideas that [...] were suppressed by disapproval and ridicule [within cycling groups] [...] the Net has given voice to those ideas' (blog commenter paul gannon in Dunckley, 2013).

(mooring) and *mobilising* information of value to advocates that blogs are recognised as making a difference to cycling's civil society in New York. For example, as illustrated by the comments below, films/videos may be used to teach key concepts to aspiring advocates (who, in turn, may teach others) or to raise awareness²⁶ of, take the edge off and warm others up to policy demands that may otherwise be unknown or seemingly too radical, whilst blog archives may be used as evidence to discredit the opposition:

we showed the 'complete streets' video²⁷ and I think most people [who watched it] [...] were like 'oh, now I know what a complete street is, I didn't really know before', so at the right time with the right group of people, you insert those ideas and then now there are [more] people [...] who understand this stuff and when they are meeting with their city council person or someone at the DOT, they can have an engaged discussion so it's really [...] their level of education and [...] that they're able to follow these things, that's how it really matters [...] someone who feels this instinctively, versus someone who feels it instinctively *and* is current on all of these best practices and knows how to talk to people [about them] (blogger Mike)

[Streetsblog] has pushed an agenda that for us, as advocates, [it has] added to our voice in a way that's a nice complement [...] I did an interview for a Streetfilm²⁸ that was about protected bike lanes and this was around the time when we were really pushing hard, we were trying to get the city to take this idea seriously, it seemed totally outlandish, but I think it's their most-viewed Streetfilm (campaigner Claire)

for activists and advocates [blogging's archival capacity] really comes in handy [...] for example we had this huge fight over the Prospect Park West bike lane [see sections 4.1 and 5.2] and the entire opposition argument was that 'this was foisted upon the community and jammed down our throats, the community never had a say, blah blah blah', but we can go back to Streetsblog and Streetfilms, back to 2006, and see there was this amazing community process that had been going on for years, all archived on the blog²⁹ (blogger Adam)

Whilst the needs Mike, Claire and Adam describe - to train advocates, document their positions, win over adversaries, raise public awareness³⁰ and make demands of the state - are nothing new, blogging itself emerges as a novel way of dealing with them, and in doing so, changes 'the order of

²⁶ See also the following testimonials that emphasise the role of Streetfilms (n.d./2) in education and awareness raising: 'There are two kinds of streets - the dangerous and inefficient kind we used to have, and the kind the public now knows is possible thanks to Streetfilms (Paul Steely White, Executive Director, Transportation Alternatives) and 'Streetsblog and Streetfilms are the gold standard in Internet advocacy and education for sustainable transportation.' (Janette Sadik-Khan, former NYCDOT Commissioner).

²⁷ See 'Complete Streets: It's About More Than Bike Lanes' (Eckerson, 2011).

²⁸ Claire's experience would seem to supplement the evidence presented in section 6.2 regarding the coproduction of blogged content and blogging as cooperative.

²⁹ For some 'archived' examples of that 'community process' and the bike lane it resulted in see Eckerson (2006) and (2007b) and Smith (2010).

things' (Isin, 2009). Another example of this - of blogging making a difference to the constitution of civil-society-as-expert-system - relates the cross-policy nature of cycling. That is, cycling is 'related' as much to transport (including other modes of transport) as it is to other policy areas - namely health and the environment - whose own advocates would like to see more people cycling because it 'is good for you, healthy, environmentally-friendly, combats pollution and congestion, and so on' (Horton et al, 2007: 6). Despite their overlapping interests however, these actors do not necessarily interact. Streetsblog changes that dynamic, according to New York bloggers Adam and Nick, who argue that the blog provides a common platform (or 'page' and 'place' as Adam suggests) that facilitates interaction from which synergies, cooperation and new qualities may in turn emerge (see section 6.2):

Streetsblog [...] literally gets everybody on the same page, there were all these different constituencies [...] interested in seeing transportation policy be a big part of Mayor Bloomberg's second term agenda [...] big corporate interests [...] the environmentalists and [...] policy wonks but also [...] the public health community [...] there were all these different constituencies and they never really had a place where they could all come together and get the day's headlines, see what big issues were popping up [...] Streetsblog kind of became [...] like a bee, a pollinator, buzzing around [...] between all of these parties [...] cut[ting] across all the different policy silos and domains of civic life, to say 'hey, this is an issue that cuts across all these different realms' [...] so you can kinda see all these people interacting with each other in a way that wasn't so easy to do before the blog (Adam)

I think we've actually changed the nature of advocacy [...] by saying 'no, this is *one* movement' [...] I can point you to readers who are cyclists and [...] some who probably never ride a bike, and they all [...] think of themselves as sustainable transportation activists and they get 'okay, as a pedestrian, as a transit rider, as a cyclist, [our] interests are largely overlapping' [...] they'll absolutely come to each other's defence on issues they might otherwise be neutral [...] there's real importance in getting the people [...] to see themselves as more ideologically-linked across modes (Nick)

Whilst the mobility of information is an important theme running through this thesis (see especially Chapter 6), this section draws attention to the value of its relative *immobility*; blogs 'as one-stop information kiosks or information hubs' (Bar-Ilan, 2004: 305); blogging as grounding information under one roof where it can rest in between its inbound and onward journeys of being deposited, accessed, ingested and retrieved (McKenna, 2007). Indeed, it will be recalled from section 5.4 that establishing a *pool or collection* of knowledge underlies some bloggers' motivation to *produce* knowledge (i.e. to create a 'body of evidence' (London blogger John), 'way of recording' (London

³⁰ On the subject of public awareness, veteran New York journalist Renee pointed out that social media make a difference to advocacy by ensuring that, whatever the issue, 'it will never be secret'. This she contrasted to the 1960s plan for a ten-lane elevated highway - the Lower Manhattan Expressway - opposition to which 'was not covered by the mainstream media - the citizen protests did not get covered'.

blogger Chris), 'library of work' (New York blogger Charles), 'resource' (New York blogger Martin), 'archive' (New York blogger Adam)). Not unlike cycling as *physical movement* being understood partially in relation to physical immobility, cycling as an *advocacy movement* rests on foundations of knowledge supporting it; in order to mobilise resources to achieve a particular goal, they need to be in part immobile; mobilisation is in part about being *rooted* in something.

London: Blogging Making Advocacy More Demanding

Whilst there is also evidence in London of blogging being used to train advocates,³¹ document their positions, win over their adversaries, raise public awareness, warm people up to policy ideas and make demands of the state, the situation differs from the one in New York in that it is more critical of instituted advocacy. Indeed some Londoners blog in response to what they perceive as the insufficient demands or success of the campaigning establishment (see section 5.3,³² and are recognised for making a difference as such:

[the blogs] are quite good, I think they allow people to say things that we [as a campaigning organisation] can't say [...] we have to be very careful about what we can say, I think it gives an outlet for more radical... [...] we need people out on the edge saying the un-sayable in order for it to become more mainstream, I think it's quite good to have people spreading those ideas (London campaigner Rosemary)

Whilst the notion that blogging makes a difference to the advocation of 'radical' policy ideas by mainstreaming them was also mentioned in New York (e.g see Claire's comment earlier in this section section), in London doing so is less a matter of supplementing, echoing or amplifying the voice of the campaigning establishment and more about, as Rosemary suggests, being *more demanding* than it; blogging as advocating policies that she and her peers can or do not.

In addition to *what*, there is the question of *how*, advocacy demands are made, and in particular, whether the campaigning establishment is prepared to physically demonstrate or protest. This is a point of frustration for some³³ (see section 5.3), with some London bloggers taking responsibility by

³¹ For example, London blogger Daniel: 'the most popular [posts on my blog] seem to be when I draw on my experience of cycle campaigning in London to write critiques of what had been done in the past [...] people were telling me yeah 'this is useful information to know' [...] I think [newer advocates] are able to draw on my experience [...] the posts on cycling infrastructure and policy are quite widely read and then they get quoted by other people, so they seem to influence other cycling campaigners'.

³² See also 'There used to be a time when cycle campaigning in London had a somewhat meek approach to making demands. A fluster here about cycle parking, a flap there about cycle route signs... Whilst well-meaning, there was little to engage the wider public - and their politicians - to really dare them to dream big. Times have changed' (Ames, 2014).

³³ See blogger Dunckley (2013) on some bloggers 'drumming up protest on a scale that clubs and campaigning organisations had been failing to do'.

staging their own protests (see section 4.4), and eventually prompting the London Cycling Campaign to join in:

I think people were a bit critical of LCC who were not putting their money where their mouth was [...] LCC came in after a bit of pressure from the bloggers and [only] then [a particular protest] became a LCC ride [...] [but] I think the original impetus was blogging [...] the bloggers inspire you, the bloggers make you turn out in your thousands over Blackfriars Bridge, and I went on the Tour du Danger [see section 4.4] [...] 'what do we want?' 'safer junctions!' 'when do we want them?' 'now!' (London campaigner Iris)

[a particular protest] ride was when LCC came out with their proposals for what they would do with the Blackfriars Bridge [see section 4.4] and it went from being 'we're shitty about this' to 'we should be doing this' and people were like 'yes, yes, we should!⁶⁴ (London blogger Matthew)

Matthew and Iris have evidently observed a difference in LCC's routine advocacy practices, which they consider to be more demanding than in the past due to pressure or turbulence induced by blogging. Moreover, the enthusiasm towards the end of each of their comments suggests that this change is welcomed by the advocacy masses (not just bloggers); that more demanding advocacy is itself in demand due at least in part to blogging supplying it; that blogging unleashes latent demand for more demanding advocacy³⁵. By saying the apparently unsayable and taking personal responsibility for organising protests, bloggers not only communicate the message that they want more from the state and civil society, but they also publicly raise questions about the reliability of the campaigning establishment to do what is best for cycling³⁶ (see section 4.3). The resulting institutional turbulence is apparent in comments, for example, by London blogger John, who 'started getting certain amounts of flak from established cycle campaigners' in response to his blog (which 'inspired me even more'). Especially notable in this regard however is London blogger Freewheeler, whose blog - Crap Cycling and Walking in Waltham Forest - is 'certainly very well known [...] in the campaigning community (London campaigner Rosemary). Putting Freewheeler's blogging - and the establishment's (perceived) responses to it³⁷ - into context, fellow bloggers Matthew, John and Daniel:

³⁴ See blog post entitled 'London Cycle Campaign finally gets angry' (Williams, 2011e), as well as (Williams, 2011k) for background on the particular protest to which Matthew refers.

^{35 &#}x27;Prior to the Blackfriars protest in March 2011 I don't believe many people were even aware that there was another way [...] we're witnessing a seismic shift in thinking, and that change is directly attributable to bloggers [...] who showed not only that was another way but also how it could be done' (blog commenter Peter in Dunckley, 2013)

^{36 &#}x27;At least you bloggerati (and tweeters) keep the rest of us mugs informed about progress (or not) and where the consultations are that we can respond to. I don't remember old school cycle campaigners doing that through any medium at all, and lo, we end up with some ineffectual white lines on a footway or in the gutter' and '[Some bloggers] have achieved more in a few short years than [some organisations] have achieved in decades' (commenters 3rdWorldCyclinginGB and Peter in Dunckley, 2013)

³⁷ As Rosemary attests, not all campaigners react to Freewheeler's blog like others seem to think: 'I really like it, I do really like it, I think it's quite good'.

the basis for everything that Freewheeler did³⁸ is ask 'what has 20-30 years of our current approach to cycle advocacy achieved?' it's a pretty huge question [...] I know that there are people out there who work in the cycle advocacy scene who won't even hear the word 'Freewheeler' mentioned in the same room as themselves (Matthew)

he's really gotten up some noses [...] the fact is, he annoyed people I think because the truth hurt (John)

he certainly ruffles the feathers of people in the London Cycling Campaign because he's very aggressive about them and very rude, but he's rude about everybody so... (Daniel)

The references Daniel makes to rudeness are revisited in the following chapter. For now the point is that by 'chipping away at the [...] received wisdom of British cycle campaigning' (Dunckley, 2013), Freewheeler and the public discourse associated with his blog have - or are *perceived* to have - resulted in institutional turbulence and a break or rupture in routine advocacy practices. Or, as blogger Matthew puts it below, there is 'stress' within cycling's civil-society-as-an-expert-system as it interacts with its environment. Collectively, reactions such as those presented above are, he argues, 'a classic example of [...] [a] paradigm shift and people being under stress working in this new way of operating'.

London: Blogging Improving Advocacy Accountability and Shifting Its Strategic Preferences

Another way that blogging may be interpreted as making a difference to instituted cycling advocacy in London corresponds to a reason some individuals there blog in the first place: to debate integrationism and segregationism as two opposing strategic preferences, to advocate the latter and express dissent regarding the establishment's preference for the former (as discussed in sections 4.3 and 5.3). Here blogging is shown to break routine practices for dealing with this particular advocacy issue, two consequences of which are 1) better accountability 2) and a change in the London Cycling Campaign's strategic preferences. Firstly, in terms of accountability:

with the rise of the blogosphere, with the rise of, you know, there's so many... in the past that would work [to censor segregationist-related information], you could essentially take a stance and you might be challenged at your AGM, and you might be challenged at local meetings, but I think it was contained, whereas I think the momentum for Dutch-style infrastructure and segregation has become much much stronger (London campaigner Mark)

³⁸ Matthew's use of the past tense is based on Freewheeler having stopped blogging in 2011, resumed it in 2012 and stopped again after three months.

some of our members have been questioning, should we be so... is our segregation-sceptic stance justified, they're picking up on some of the blog postings that have been triggering the segregation debate and echoing some of those messages [...] some of our members and campaigners were beginning to think 'actually there's some sense to this' [...] [they] have started changing sides in the debate and I think we've got to reflect on that, we are a democratic organisation, I do not set policy, my team doesn't set policy, the city council sets policy in response the views of our campaigners, of our members, so we're going to need to conduct a bit of an open debate about this [...] and given that the internet is now central to how people communicate, it has to play a role in how we now conduct that debate (London campaigner Rory)

As Mark suggests, by opening the floodgates, blogging has caused a rupture in once relatively contained information exchange. Indeed, his comment speaks very much to Coleman's (2005: 277) point that blogging 'provide[s] an important escape route from the 'if you don't come to the meeting, you can't have anything to say' mentality' (Coleman, 2005: 277). The more information is fluid, the more difficult it is to control and the easier knowledge claims are to challenge. The knowledge foundations on which cycling's civil society rests have evidently loosened as alternative claims multiply and are legitimated: 'there is a change in the discourse [...] the need for highquality segregated cycle infrastructure is no longer marginal in the way it was' (London blogger Daniel). Space is opened up for 'a multitude of alternative optimization strategies'; the 'conclusion of a dispute over what counts as knowledge can no longer have the same finality [...] perspectives once considered illegitimate have won recognition and importance' (Beck et al, 2003: 16 and 20). Both Mark and Rory suggest that by interacting with blogging, advocates, and thus the organisations or systems they constitute, have changed: 'Communicating knowledge from one system to another causes structural changes in the receiving system' (Fuchs and Hofkirchner, 2005: 247). By seemingly producing and revealing a constituency of segregationists, blogging challenges the legitimacy of organisations with a 'segregation-sceptic stance' that are tasked with representing the views of their members (and potential new ones); blogging pressurises organisations to adapt or defend their strategic preferences; it encourages accountability. Cyclenation (see section 4.3), for example, issued a statement (see Figure 4) in response to the blogging of Freewheeler, whilst campaigner Rory explains the rationale underlying his decision to interact with or respond³⁹ to the blogs:

I just sort of felt, well actually [...] it does make sense to respond without... in a way that is not judgemental, not dismissing the case for segregation but acknowledging that there is a debate (Rory)

³⁹ For representatives of expert systems, the matter of responding to or interacting with blogs is not necessarily straightforward - a topic discussed in section 8.1.



Cyclenation has noted the comments made by the author of Crap Cycling in Waltham Forest regarding its own policies and those of the CTC, in particular with regard to segregated cycling facilities. We support efforts to improve cycling conditions in Waltham Forest and elsewhere but we believe that these comments misrepresent our views. We do not wish to assert that conditions for cycling in the UK are ideal: if they were, there would be no need for campaign groups. We support the "Hierarchy of Provision" also supported by the CTC:

Consider first	Traffic reduction
	Speed reduction
	Junction treatment, hazard site treatment, traffic management
	Reallocation of carriageway space (e.g. bus lanes, widened nearside lanes, cycle lanes)
	Cycle tracks away from roads
Consider last	Conversion of footways/footpaths to shared use cycle tracks for pedestrians and cyclists

However, members of our groups have undertaken study tours of both Holland and Denmark and are aware of the benefits that the off-road network in these countries has brought. We are also aware of the limited success of the UK National Cycle Network, which was based on the Danish model. There are three crucial differences

Figure 4: Response from Cyclenation (n.d.; highlighting mine) to blogger Freewheeler of Crap Cycling & Walking in Waltham Forest (continued)

between these countries and ourselves that would need to be addressed for the Dutch model to work in the UK.

- Slower urban traffic speeds. Typically urban traffic speeds are between 20 and 30kph in Holland This is why we support the '20's plenty' campaign in the UK.
- Stricter liability for drivers. In Holland and other European countries, the operator of the vehicle likely to do the most damage generally takes responsibility for a collision. Note that this distinguishes liability from culpability, and that it would also mean that a cyclist who collided with a pedestrian would be liable. The introduction of this rule has led to drivers being much more careful around cyclists. Studies have shown that cyclists who have just emerged from an off-road network onto the road are particularly at risk from collisions with vehicles. Cyclenation supports the introduction of strict liability in the UK.
- Cyclists right of way. In Holland, Denmark and Germany cyclists have right
 of way over traffic emerging from side roads even if they are on an off-road
 cycle track. This is not the case in the UK, and results in cyclists having to
 make many stops over even a short off-road journey.

If these three issues were addressed, Cyclenation would be happy to support the development of an high-quality off-road cycle network in the UK - the emphasis being on quality and on solutions that are appropriate to local conditions.

We note that the author of Crap Cycling in Waltham Forest has not enabled comments on his blog, and we have not therefore been able to directly challenge the misrepresentations he or she has made about us. We would therefore like to invite this blogger to attend one of our conferences and present his views so we can have an open debate about them.

A second way that blogging is understood to make a difference is by influencing the strategic preferences of the London Cycling Campaign. In 2011, LCC canvassed its members to determine which foremost issue the organisation should campaign on leading-up to the city's mayoral election (see section 4.3). The outcome - *Love London, Go Dutch* - demanded, amongst other things, for the new mayor 'to build continental-standard cycling infrastructure' (LCC, n.d./2) - a change in strategic preference described by blogger Dunckley (2013) as 'the most significant shift in the direction, ambition and courage of campaigning in more than half a century' and considered by some to have been influenced by blogging:⁴⁰

⁴⁰ See blogger Dunckley's (2013) account of having been told by a 'cycling campaigner of the old school' that 'All that blogging has achieved is 'Go Dutch", which, if true, Dunckley argues, would mean that 'in a

I think [Go Dutch] is actually an influence of the bloggers (London blogger Daniel)

LCC has gone for their Go Dutch campaign, that's not specific influence of me but of the blogging in general (London blogger James)

it is very clear there has been some fairly vociferous blogging [see also section 8.3] [...] that ha[s] actually been quite catalytic in prompting the LCC to shift its stance (London campaigner Rory)

Rory went on to suggest that both the LCC's decision to canvass its members, as well as the 'Go Dutch' outcome itself, have consequences for other advocacy organisations: 'it adds impetus to something we were probably going to have to do anyway [...] to reflect on [segregation] because historically we have been quite segregation-sceptical'. As such, it may be argued that blogging not only made a difference to the strategic preferences of the LCC as one particular organisation, but also to the various elements and systems, which interact and adapt to one another (i.e. other advocacy organisations, expert systems). Finally, it is notable that one particular blogger, Freewheeler of Crap Cycling and Walking in Waltham Forest, is attributed with having influenced the LCC's membership and its preference for 'Go Dutch':

I'd suspect that Crap Cycling and Walking in Waltham Forest [...] together with allied [blogs] has probably considerably influenced LCC's membership (London blogger Chris)

I started reading Waltham Forest and I started thinking 'hmmmm' and then I noticed that LCC had changed its mind to the Go Dutch thing and [a fellow campaigner] changed her mind, and now [she's] not a woman to change her mind, but she has changed her mind [...] how interesting [...] I completely buy that argument [about segregationism] and I bang on about it the whole time in my [local] group (London campaigner Iris)

you can see that evolution coming out from [Crap Cycling and Walking in Waltham Forest] and the fact that a little blog can influence the whole direction of London's main cycling campaigning... [...] everyone's psyche is embedded in there because they've been reading it for ages that it actually made them choose that option [to 'Go Dutch'] [...] it's such a powerful medium it's scary (London city official Elisabeth)

few short years bloggers have achieved something far more exciting, far more concrete, and far more worthwhile than his club has achieved in decades.'

London: Blogging Changing the Nature of Civil Society and Its Actors

At the launch of the strategy document outlining the city's latest cycling policy (GLA, 2013; see section 4.1), London's cycling commissioner stated:

Today's document shows how seriously the Mayor has taken his Go Dutch promise to the LCC and the cyclists of London. Both the Mayor and I pay tribute to the LCC, journalists, bloggers and other campaigners for driving the issue so far up the political agenda (Gilligan in Lloyd, 2013)

The point of this section and one worth drawing out of the commissioner's statement is not any difference blogging has made to cycling policy in London⁴¹, nor that bloggers are recognised by the mayor and commissioner, but rather, that bloggers are recognised as campaigners in their own right, and as such, change the nature of civil society and who or what are considered legitimate advocacy actors. According to this project's participants, bloggers are understood to have achieved such status by 1) encouraging interaction 2) individualising advocacy 3) raising questions about the legitimacy of instituted advocacy. Illustrating all three of these points, a London blogger⁴² brought two diagrams to his interview that reflect his interpretations of cycling advocacy before (Figure 5) and after (Figure 6) the emergence of blogging and other social media. Explaining the diagrams and the contexts they represent, he stated:

⁴¹ The apparently Go Dutch-inspired strategy the commissioner refers to favourably mentions the term 'segregation' (or its variations) 39 times, the significance of which is evident in a historical context. According to blogger Arditti (2013c): 'For decades it was almost impossible to mention segregation in the world of UK cycle campaigning. It was "too controversial". It stirred people up too much. The word had to be avoided, on pain of ostracism [...] The word segregation, for so long a dirty one in British cycling, has now been decontaminated. This is an essential breakthrough [...] Nobody in British cycling ever will be afraid of talking of segregation again. Nobody will ever be ridiculed or ostracised for supporting segregation again. Those battles are fought and are now over.'

However, nearly a year after the policy's launch, Mayor Johnson stated: 'I still think, broadly speaking, an integrationist approach is the right way to go.' (in AsEasyAsRidingABike, 2014; see also section 4.3).

⁴² For reasons of anonymity, here I have left out this blogger's pseudonym.

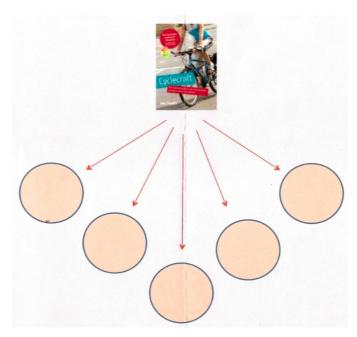


Figure 5: 'Old media'

this [Figure 5] is old media, so someone like John Franklin would write Cyclecraft⁴³ - and I pick him intentionally - and the readership would each have a copy but they would take it away and digest it individually, so they might read it and not have anyone else question the concept of what they're reading or not have anyone else to discuss what they're reading about, so they go away and go 'well, he's the expert', that's that, and it went reasonably unquestioned and it was very much a one-way process and these people, regardless of how they actually felt about what they just read, they just weren't able to form a consensus and then, ta-dah [...] [Figure 6] this is how it works now, so you've got [...] in the middle, this could be me, this could John Franklin, this could be [another blogger], we're all putting out information, we're all repeating the information to one another or passing it on, but we're all forming this level of consensus between ourselves [...] and perceptions are being challenged by this kind of looping around of ideas that's going on

⁴³ Cyclecraft (Franklin, 2007). Franklin is a 'key figure' in the promotion of 'vehicular cycling', which suggests cyclists integrate with motorised traffic rather than be segregated from it (Aldred, 2013; see also section 4.3). According to London blogger Daniel, Franklin's claims represent an outdated and 'fundamentalist point of view': 'I don't think many people believe [his claims] anymore, I think that we have moved the debate on away from that now'.

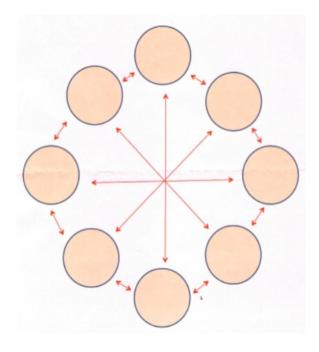


Figure 6: 'This is how it works now'

One way of interpreting this blogger's interpretation is to use the model of knowledge production (Fuchs and Hofkirchner, 2005) discussed in sections 6.1 and 6.2. As such, in Figure 5, knowledge about what is best for cycling is understood to remain largely confined to the individual or cognitive level without blogging to mediate advocates' communication and cooperation. Without 'anyone else to discuss' and 'question the concept[s]', advocates are understood to have little choice but to passively consume and rely on expert knowledge about what is best for cycling ('he's the expert'); they 'digest it individually'; communication is a 'one-way process'. Enter blogging and other internet technologies, the affordances of which facilitate advocates' interaction and communication, from which synergies and collective properties may emerge, such as 'a platform for advocacy', 'consensus' or indeed, 'similar hymn sheets', as this blogger goes on to suggest (likewise, recall references to 'homogenisation' in section 6.2). Such new knowledge and/or knowledge resources are in turn used to arm advocates, convert new ones as well as to challenge and counter expert knowledge claims about what is best for cycling (see sections 4.3 and 5.3). The knowledge foundations on which cycling as an advocacy movement rests are loosened and space opens-up for so-called alternative knowledge and actors (Beck et al, 2003; see section 2.3). Somewhat paradoxically, in other words, the more advocacy is individualised, the more interactive and synergetic it may become. From the standpoint of *individualisation*, this is hardly surprising, given that interacting and integrating with one's environment - networking or self-organising - is essential to fending for oneself and acquiring knowledge in second modernity (see sections 2.3 and 5.4; Chapter 6)(Beck and Beck-Gernsheim, 2001; Rainie and Wellman, 2012). The individual subject is

indeed 'a product of self-selected networks', as the blogger's above comment attests (Beck et al, 2003: 25). Two examples reflective of the context represented in Figure 6 include the accomplishments of blogger Carlton Reid and the evolving practices of Iris and other campaigners:

[Carlton Reid]⁴⁴ uses new media very effectively, he has this series of different blogs [...] he very much helps shape the debate because this whole road tax thing has basically been just him and he's managed to persuade the Automobile Association and various other groups to stop using the word 'road tax' and to use 'car tax', so it's this one-man campaign that has actually changed things (London journalist Paul)

there I was writing letters and going to group meetings, now I spend my time on my computer at home, go to rides organised by bloggers, [and] I suppose I'm quite typical (London campaigner Iris)

Rather than rely on advocacy organisations to make inroads on road tax, Carlton Reid has apparently taken matters into his own hands, whilst Iris seems to have abandoned instituted advocacy altogether. As such, Paul and Iris' comments exemplify the erosion, or gradual retreat and undermining of 'ascriptive patterns of collective life' in second modernity, or of more centrally and hierarchically governed institutions, linear systems and monopolies of professional knowledge, in this case as represented by instituted advocacy (Beck et al, 2003: 6; Lash, 2001). And whilst the above two comments do not speak explicitly to the perceived 'failure of expert systems to manage risks' (Beck, 2006: 336), they do seem to demonstrate the success of blogging in weaning at least two individuals off civil society as one such expert system (see section 5.3). Moreover, participants also contrasted individualised and instituted advocacy in terms of their respective demands, perceived success and role in leading versus following (see also section 7.2 on the changing order of 'information leaders'):

the fact [cycling safety] is becoming an election issue is almost entirely down to individual campaigners and small groups, not even bigger organisations like the LCC (London journalist Paul)

there's one blog that I think is beginning to have a real effect on the LCC [....] and it's quite interesting to see now that the LCC in a lot of their blog posts will now follow what [that blogger] has said and say 'as he said [...], we need to email such and such a person because he's saying this' (London blogger Andrew)

some of the sort of campaign-type stuff has been coordinated less so directly by LCC, but increasingly Cyclists in the City blogging on it and calls to action⁴⁵ on it and that kind of thing (London city official Annabelle)

⁴⁴ See: (Reid. n.d.)

⁴⁵ See for example: (Williams, 2013b and 2013c).

Taking the above comments a step further, London city officials Annabelle, Robert and Samantha questioned - in light of blogging - the extent to which civil society organisations actually *represent* London's cyclists⁴⁶:

what I don't know, which we have talked about, is to what extent the campaign groups still represent the majority of cyclists, I think they did because [cycling] was such a minority activity [...] but as it becomes a more and more mainstream mode, to what extent do they still represent the majority of cyclists or to what extent to the blogs represent the views of normal cyclists? what is the most representative voice out there? when we do consultations [...] we formally consult the campaign groups [...] it's always interesting to think though, well, we basically don't know how representative they are (Annabelle)

[in relation to blogging, someone] was saying to me was that the LCC isn't a representative sample of cyclists in London [...] and after he said that I thought 'I wonder...' because our main contact with cyclists is through the LCC, so I wondered if we should actively seek other ways to get in touch with cyclists apart from just through the LCC (Robert)

[journalists] would call and interview us and then they'd go and interview the LCC and what I'd say is 'you know, you really should be giving [...] [the blogger] London Cyclist a call and speaking to him [...] because he's actually being followed by people [...] that aren't members of LCC or don't necessarily think that they reflect what they think about cycling, why don't you speak to this guy who's actually really representative of cycling in London and you know, is making a big noise social-media wise' [...] it would be very interesting, I was thinking this the other day, to see what [London Cyclist's] following is like, for example, or Crap Cycling [and Walking in Waltham Forest] and Gaz and compare that with the membership numbers for CTC and LCC (Samantha)

By prompting city officials to question the representativeness and legitimacy of cycling's civil society organisations as their primary source of knowledge about the needs, wants and values of London cyclists (and potential cyclists), blogging is shown to make a difference to the very nature of advocacy, who or what is considered a legitimate advocacy actor, civil society as an expert system, as well as those with which it interacts (i.e.the state)(Coleman, 2005; see also 5.3 on civil society and representation). As such, their comments - as indeed all of those presented in this section - hint at the potential turbulence blogging may generate within the established order,⁴⁷ or to the 'existing way of doing things', as London blogger Matthew suggests:

⁴⁶ It remains questionable however just who these organisations are supposed to represent (e.g. their members, non-members, cyclists, potential cyclists) (Aldred, 2013).

^{47 &#}x27;[A]ctivists of the old school are being marginalised', according to commenter paul gannon (in Dunckley, 2013), because of the emergence of blogging's alternative voices.

in history it's very easy to identify moments where there have been paradigm shifts in the way of doing things, whether that's the way we get around, the way we communicate, the way we work, and I think we're going through one of those paradigm shifts at the moment in terms of how we campaign and communicate with each other, and whenever you go through these shifts there are people who fall by the wayside, people who get upset with the challenge that they face to their existing way of doing things, people who feel under pressure as a consequence of change, I'm choosing my words very carefully here, and the symptoms of those people being under stress are people either disconnecting, lashing out or there's an element of psychosis to it when people decide that their opinion which hasn't been challenged for a very long time is so valid that any challenge is inconceivable, not even to be considered, so they stick to their guns by everything, it's the German soldiers who didn't get the communiqué about the war being over and not believing it, and as I say, all of those things are a symptom of people or organisations under stress

Section Summary: Blogging Making a Difference to Cycling's Civil Society

This section demonstrates how the emergence of blogging has made a difference to cycling's civil society as an expert system. Fundamentally, representatives of advocacy organisations are shown to pay attention to and interact with blogs. In New York, blogging is understood to supplement their efforts, whilst in London, the campaigning establishment - of which some bloggers are highly critical - becomes more demanding, accountable, questioned and segregationist, whilst the very nature of advocacy becomes more interactive and individualised. Similar to this chapter's first two sections, in which bloggers are shown to emerge as policy and media actors, this one suggests that bloggers are advocacy actors in their own right - that is, acting independently of the institutions on which they would traditionally have had little choice but to rely in order to advocate cycling. Once illegitimate claims about what is best for cycling - namely, segregationism in London - are shown here to become a more accepted part of 'the system' because of blogging, in turn calling into question the legitimacy of naysayers and pressuring them to defend their position. This evidence may be interpreted as reflecting macro-level changes in knowledge outlined in section 2.3, as well as the wider climate of risk and reflexivity in which those changes are situated. Ultimately, like the preceding sections of this chapter, this one shows that because of blogging, 'the order of things will no longer be the way it was' (Isin, 2009: 379); 'the difference in the environment does make a difference to the system' (Fuchs and Hofkirchner, 2005: 243). Before launching into the next and final discussion chapter, there are a few concluding points to make about this one.

7.4 Chapter Conclusions: New Order: Interaction, Adaptation and the Making of Difference

I never think in terms of 'measuring' influence, I'm not that analytical, but I'm happy and overwhelmed more than anything when things start to happen as a consequence of something I've been involved with (London blogger Matthew)

Similar to Matthew's own approach to influence, this chapter is concerned with *difference*, *emergence* or the notion of 'things start[ing] to happen' as a consequence of blogging. Representatives of expert systems are shown to pay attention to and interact with blogs and bloggers, conditions from which new qualities emerge, not least better accountability and blogging as a legitimate policy, media and advocacy actor in its own right. Underlying all of this of course is the emergence of blogging as 'an external difference' to three pre-existing⁴⁸ systems, the significance of which being that 'the difference in the environment does make a difference to the system' (Fuchs and Hofkirchner, 2005: 243); 'communicating knowledge from one system to another causes structural changes in the receiving system[s]' (Fuchs and Hofkirchner, 2005: 247); 'the order of things will no longer be the way it was' (Isin, 2009: 379); we are on 'the edge of something interesting' (commenter The Ranty Highwayman in Dunckley, 2013).⁴⁹ In short, blogging *alters the course*. Its ability to make a difference is presumably not without limits however, as the next and final empirical chapter goes on to discuss.

^{48 &#}x27;As things age, they become much more vulnerable to disturbance' (Lovelock in Moss, 2014).

⁴⁹ For detailed, publicly-available accounts on the difference blogging about cycling-related transport policy is perceived to make, see Dunckley's (2013) original post, "All that blogging has achieved is 'Go Dutch'," and other flattering criticisms', and well as his readers' comments in response to it.

Chapter 8: Plus Ça Change: Reliance and the Fallibilities of Policy Blogging

In contrast to the preceding two chapters that present blogging as a largely successful attempt to produce and mobilise knowledge and to make a difference, this chapter considers blogging's less successful side. Information and its technologies do not 'either have solely positive nor solely negative effects but both positive and negative ones at the same time'; they enable and constrain actors and social relations (Fuchs, 2008: 302). As such, what can be said of blogging's limitations, constraints and unintended consequences? What prevents blogging from being anything less than successful, or not accomplishing what bloggers set out to achieve? What factors limit the ability of blogging to make a difference? This chapter is divided into four sections, findings in the first of which contrast to those presented in the previous chapter, in that not everyone pays attention to blogs. The perceived ineffectiveness of blogging is discussed in the second section, whilst the third argues that abusive blogging produces new forms of exclusion. The fourth and final section concludes that despite everything, the ability of blogging to make a difference is ultimately limited by the public's reliance on expert systems and expert knowledge.

8.1 Not Paying Attention to Blogs

Despite the evidence presented in the previous chapter, not everyone pays attention to blogs. And whilst paying attention does not automatically equate to blogging making a difference, *not* paying attention does mean that opportunities to think about the issues blogging raises, to communicate about them, to generate public discourse and institutional turbulence, to interact, to break routines, to develop synergies and collective properties and to change the overall order of things are all more limited. Lack of time and interest are the main reasons participants gave for not paying attention:

you could spend an hour easily, once you start reading [...] and you think 'what have I done this evening? [...] they were a novelty to begin with, but for me, the novelty's worn off [...] I don't tend to read blogs (London city official Robert)

I'd love to spend more time reading cycling blogs, I don't really have the time (London journalist Paul)

I dabble but I'm not... to be honest I'm not super up... [...] occasionally I'll log on but I'm not... I don't have time (New York campaigner Caroline)

I actually just got bored with the advocacy blogs (European campaigner Leo)

A related subset of comments refers to the 'genuine difficulty of 'listening to everyone" (Coleman, 2005: 278); or as London blogger James put it, 'there's only so much you can read'. Effective democratic representation relies on the ability to aggregate 'individual self-expressions into a coherent [...] 'public voice" (Coleman, 2005: 278), and whilst Twitter may go some way in this regard (see section 6.1), the sheer volume of information associated with blogging risks creating incoherent noise. Rather than listen to or pay attention to it, those with official mandates to represent may block it out; rather than reveal a constituency, blogging can unintentionally obscure it (see section 7.1):

you generally don't know how much attention to give to any given voice, how many people agree with [bloggers] is actually very hard to tell, you can see a whole load of postings go up but [...] how many people are reading them? [...] it's very hard to tell (London campaigner Rory)

there are so many individuals, you couldn't start meeting, trying to meet all the individuals [...] it could be the same person twice or ten times, you don't know [...] it's so big, how do we capture that? [...] it's just so enormous (London city official Robert)

the amount of stuff out there, the resources, it's incredible, I guess it's almost too much information [...] as a campaigner [...] you're like 'what's the formula?' and there's so many people with so many different answers, which is almost overwhelming (European campaigner Jacob)

Like the above representatives of expert systems, bloggers too recounted not paying attention to blogs (other than their own) for reasons of time and interest:

increasingly I don't have the time to read blogs (London blogger Matthew)

there is a smaller and smaller fraction of stuff [on blogs] that I think is really new, there's nothing that's blowing my mind [...] I mean honestly, I don't really read them (New York blogger Mike)

I don't read them regularly [...] I could tell you some of my favourite [...] [blogs] but I don't read any of them more than once a month (New York blogger Nick)

By not reading the blogs of their peers, bloggers limit their own capacity to make a difference. That is, although bloggers and their peers may be communicating with each other in ways other than blogging, their opportunities or ability to cooperate and develop synergies and emergent properties, including knowledge used to arm each other, convert others or challenge the existing order of their external environment, is not maximised (nor is it with anyone who fails to keep abreast of updates in their field). Moreover, they risk developing some of the very shortcomings they blog to overcome (e.g. inattentiveness, inflexibility, exclusion; see Chapter 5). In addition to a

lack of time and interest, another more underlying explanation of their behaviour may be that bloggers consider themselves *already* armed with knowledge - to the extent of blogging about it themselves - precisely because they paid attention to blogs *previously*, before their own blogging began to occupy their time and/or satiate their cognitive interests.

Notable here moreover is a point first made in section 3.2: just because someone *says* they do or do not pay attention to blogs is not a guarantee of their actual behaviour. Indeed all of the above participants indicated elsewhere in their interviews at least some familiarity with blogging, despite their claims here. Equally, just because participants claim to pay attention or indicate awareness in other ways does not mean they are active or dedicated blog followers of blogs. Of course that is not to say anyone is lying, but rather, to acknowledge that 'paying attention' is more subtle than either/or, and that such discrepancies between saying and doing are 'common' to interviews as they rely on participants' evaluation of their own behaviour (Gillham, 2000).

Finally, after a hiatus in the discussion of evidence collected in Paris (because relatively few are blogging there), here the opportunity emerges to briefly revisit it. That is, although they are generally not blogging, are Parisians paying attention to those elsewhere who are? Most participants replied simply 'no', and that they had not given policy blogging much, if any, thought. A few others cited lack of time and interest:

I don't have the time, sometimes I'll start to read things, but not as often as I'd like (Paris city official André)

there must be some Parisian cyclists' blogs, but I don't follow any [...] nobody thinks about blogging (Paris campaigner Patrice)

I spend so much time on my own blog that I've increasingly abandoned others', I admit it (Paris blogger Inès)

it's hard for [cycling policy blogs] to surprise me (Paris transport consultant Edouard)

I don't do blogs, I don't Facebook, I don't tweet (Paris campaigner Luc)

Section Summary: Not Paying Attention to Blogs

The purpose of this section is to demonstrate that, in contrast to evidence presented in the previous chapter, not everyone pays attention to blogs. Opportunities for interaction are therefore

not maximised, limiting blogging's ability to make a difference. And whilst those interpretations are my own, others recognise other limitations of blogging, as the next section goes on to discuss.

8.2 Blogging as Ineffective

Blogging's ability to make a difference is understood by participants to be ineffective for broadly two reasons: 1) failing to translate words into actions and results 2) failing to reach beyond a minority of individuals and interact with the wider public. Firstly, there is thought to be a gap between what bloggers demand of expert systems and what they actually achieve. That is, although demanding, blogging (like cycling's civil society in London; see section 5.3) is not considered successful enough. It is criticised for not producing tangible results, or effectively, new, collective patterns. It is not regarded as having made a transition from the individual, cognitive dimension to system change (despite complex systems and their emergent characteristics being irreducible to the kinds of micro-dynamics that some participants apparently would like to see) (Urry, 2002b; 2005; Fuchs and Hofkirchner, 2005):

ultimately all these [bloggers] can have as many ideas as they want but they need to influence the policy-makers and the people with the money (London city official Samantha)

take Blackfriars [see section 4.4], whether [blogging] has influenced what we've actually ended up doing, I would say possibly not, and probably the same with cycle superhighways and cycle hire (London city official Annabelle)

it's like in my cycle club, there's probably about 500 people [...] but [...] it's about ten people who participate and about six who actually do anything, and it must be the same with these blogs, hundreds and hundreds of people read them but only a very small proportion actually act on them or respond positively (London campaigner Iris)

I've got a theory [...] based on the local blog that I read [...] it's very entertaining [...] and if you're disgruntled about cycling it's quite nice to read it, have your opinions reinforced, but I don't think anything gets done about the issues that he raises [...] [I'd like to know] about examples where something has actually happened as a result of [a] blog [....], their mini blog campaign (London transport consultant Nigel)

I'm still not sure how much [blogs] actually do in terms of changing other peoples' minds and changing legislation [...] I'm a bit sceptical [...] they come up with really good ideas, but what's missing [...] is how to get from one step to the next [...] the blogs tend to focus a lot on 'okay, this is what it should be' but it doesn't describe any of the steps in between [...] I'd be really interested to know [...] how much influence the blogging world has (European campaigner Jacob)

we just need more people to cycle more often not just to talk about it (European transport consultant Thomas)

Secondly, the ability of blogging to make a difference is understood to be limited by its reach. That is, not everyone is mobilised via blogging; blogging is seen to be concentrated around a minority cluster of individuals, 1 rather than the 'majority of people' (Matthew) - 'ordinary people' (Rosemary), 'the wider public' Nigel), 'the hoi polloi' (Charles), 'a big enough audience' (Brad) - who some bloggers seek to convert (see section 5.4):

the majority of people who ride a bike don't read bike blogs and get into all of this [...] the majority of people who are pissed off with the political decisions, i.e. to rip out a cycle lane, aren't interested in politics (London blogger Matthew)

I don't know much about the wider role [of blogging] [...] whether people, like ordinary people, are finding [blogs] or are using them (London campaigner Rosemary)

the trouble with blogs is how do the wider public get to hear about them? [...] no one's really paying any attention apart from a few disgruntled cyclists (London transport consultant Nigel)

it isn't like we're reaching the hoi polloi, we're not reaching seven million people who are going 'okay, I want bike lanes in my neighbourhood' (New York blogger Charles)

we don't really reach a big enough audience to shape the level of public knowledge (New York blogger Brad)

As Brad suggests, blogging's capacity to develop 'public knowledge' (or 'objective knowledge', Fuchs and Hofkirchner, 2005) is dependent on interactions with its *external* environment. With such interactions thought not to be happening, blogging is regarded as insular or preaching to the converted² rather than converting. Blogging is thought to be stuck spinning information *internally* amidst a small (but dedicated and necessary, see section 5.4) base of those already in agreement (Daniel); those 'already in the sphere' (Rosemary); 'everybody who's 'in' (Sara); a 'small group of people' (Darren); an 'incestuous' group (Leo); those inside the 'bubble' (Jacob):

¹ However see blogger Dunckley (2013) who argues that, unlike instituted advocacy, which tends to appeal only to 'the same old crowd', bloggers have demonstrated an ability to attract and motivate wider segments of the public.

² I've never really understood 'preaching to the converted' as a criticism [...] The Pope preaches to the converted, and he's way more influential than the bloke who shouts about salvation on the pavement outside Brixton tube. Preaching to the converted is what motivates the converted to action' (Dunckley, 2013).

it's very hard to tell who actually does read [my blog], and it's my suspicion that it's mostly read by people who agree with me anyway, so to that extent maybe it is not achieving that much, but it's just so hard to tell [...] motorists don't take an interest in the cycling blogs [...] maybe if they started to do so maybe we would know we were having a bit more impact in the wider world, it's cyclists who read these things (London blogger Daniel)

I sometimes wonder whether all we do on Twitter is really what we're doing anyway, which is networking with other people who are already in the sphere [...] it's the 100 serious activists, basically talking to each other the whole time, I don't know how much of a role these [blogs] provide in outreach (London campaigner Rosemary)

there's a bit of an echo chamber [...] and one has to be careful [...] that's a bit of an issue with social media [...] there's a bit of everybody who's 'in' talking to everybody else who's 'in' (New York blogger Sara)

if you're just preaching to the small, right now, small group of people who are already biking [...] you're not going to get a lot of people to relate to that [...] everybody in New York has to walk at some point and taxis are lined up on the sidewalk in this city, so you have to branch out a little bit (New York blogger Darren)

[blogging] is horribly, horribly incestuous, it's a group of people talking to each other, particularly the London scene [...] I don't think the blogging enthusiasts world is talking to [potential or future cyclists] at all [...] and you can get a debate going endlessly amongst that community [...] sadly, it is sometimes raging against the machine rather than helping (European campaigner Leo)

my first thought is that [blogging'] has got a huge influence, but then again I'm so stuck in that whole world of cycling that I think it definitely influences the world of cyclists and the cycling community who often reads what everyone else is saying, but I don't know how much it gets outside of that bubble [...] I think [bloggers] speak a lot to themselves, which is a pity (European campaigner Jacob)

According to the above comments, those represented, mobilised even, by blogging - at the exclusion of others - include cyclists, cycling advocates and bloggers. So whilst this project's three expert systems are, each in their own way, perceived to be exclusionary (see Chapter 5), here blogging is regarded as less-than-inclusive... of effectively, everyone (i.e. those who do not cycle, advocate for cycling, blog or pay attention to blogs about cycling-related transport policy). Because of all this, the *representativeness* of blogging is questioned, indeed much in same way as it is of expert systems (see Chapter 5):

only certain sections of the population produce or follow blogs [...] so I don't take [them] as a representation of a population's views (London city official George)

blogs can become huddles around which a non-representative group will cluster (London campaigner Rory)

Presumably one of the reasons George and Rory are concerned about representation is because they - unlike bloggers - have an official mandate to represent. That is, the success of their work depends on the ability to aggregate - not multiply - information about the needs, wants and values of individuals on whose trust the expert systems George and Rory represent depend (Coleman, 2005; Giddens, 1991a; see also previous section). Rather than facilitate the task of representation, blogging is understood to complicate the 'problem of communicative scale' (Coleman, 2005: 278). In George and Rory's view, blogging does not reveal *constituencies* (see section 7.1) so much as it does *individuals*. Like other forms of mobility, the mobility of information may thus be seen as both an *asset* and a *burden* (Freudendal-Pedersen, 2009).

Why blogging is thought not to reach out beyond a certain core is meanwhile understood in terms of 1) cycling-related transport policy as a niche topic 2) the ways in which bloggers approach that topic. Firstly, despite the relevance of cycling-related transport policy to such universal concerns as public health, the environment, the 'crisis of daily commuting' (Smith, 2002: 435), social equality and society's most vulnerable or immobile (children, the elderly, the disabled, the poor, pedestrians), and in contrast to those with official mandates to represent the wide-ranging concerns of the masses, blogging, both as a medium and about cycling-related transport policy, is understood to deal in highly-specialised content that appeals to (the cognition of) only narrow segments of the public:

we have to find some way of anglicising [our message about Dutch best practice] to make it more palatable to a British public that don't even know they want to cycle yet (London blogger John)

I don't think most people get this stuff, I think it's counter-intuitive and people just haven't spent a whole lot of time thinking about it (New York blogger Brad)

the nitty gritty sense of what you can do in transportation and what you can do in sustainable transportation is still a little bit of a niche concept, I mean, I tell people where I work, at parties and things as you do, and people who seem knowledgeable, interested people in the world, very often don't know what DOT is, but that's fine, but don't even have a sense that the city streets have been changing over the last few years, I'll say 'have you noticed more bike lanes have gone in? and that pedestrianisation at Time Square and Broadway?' [see section 4.1] and maybe that hasn't quite... they've probably walked down these DOT projects and enjoyed the space but for a lot of people it's just this background where... like this plaza here, no one's thinking 'oh, was this a government project?' (New York city official Nathan)

By emphasising the perceived tendency of 'most people' to not *think* or *know* about cycling-related transport policy, John, Brad and Nathan effectively suggest that individual *cognition* is a prerequisite for *interaction* with blogs (hence supporting Fuchs and Hofkirchner's (2005) model, see section 6.1). That is, without having already spent 'a whole lot' of - or even some - time thinking about this topic, individuals are less likely to interact with blogs devoted to it and to together (cooperatively) develop new systemic qualities. In other words, the ability of blogging to make a difference is, to a certain extent, limited by the *prior* knowledge of its external environment (hence reinforcing the importance of mass media in raising awareness and shaping perceptions of risk, see section 4.2).

For those with little prior knowledge, but who 'happen to Google 'cycling in London' (London blogger Matthew), it becomes apparent that another possible reason why 'most people' do not interact with blogs is the welcome they may receive when they get there. That is, the *approach* bloggers take to their niche subject area may limit their ability to make a difference if it does not captivate and sustain others' interest (cognition). For example, Andrew and Matthew describe Freewheeler's blog, Crap Cycling and Walking in Waltham Forest (see sections 5.4; 6.1; 7.3) as difficult for most people to relate to and hence interact with:

reading the same level of sustained anger everyday is actually really difficult to digest and I thought, 'well if I'm, as someone who's this deep into thinking about this, switched-off by [Crap Cycling and Walking in Waltham Forest], what would people who just happen to use a bike, to ride to the shops once a week who happen to Google 'cycling in London', what would keep them hooked in?' [...] [his blog] was published with such intensity and vehemency on such a consistent level that it bordered on the psychosis, and I mean that in the nicest possible way [...] the mediation if you like between cause and effect, or activism and result, is to make [one's blog] appealing and engaging and as relevant as possible (London blogger Matthew)

[Freewheeler] is a bit of a lone crusader and the problem is that he doesn't really relate to a big audience, he's very much 'here's this one specific street corner where it's unbelievable that this sort of cycling infrastructure has been built' [...] not a lot of people relate to that (London blogger Andrew)

Section Summary: Blogging as Ineffective

To summarise, expert systems may thus be seen to question the legitimacy of blogging on much the same grounds as the (blogging) public questions the legitimacy expert systems (see Chapter 5), i.e. for being inefficient, unrepresentative and - as the next section discusses - abusive of power. Thus expanding on Matthew and Andrew's main point - effectively, that 'the way in which

the debate is conducted does matter' (London campaigner Rory) - the next section goes on to discuss the limitations imposed by abusive blogging.

8.3 Blogging as Abusive

In *The Politics of the Risk Society* (1998: 125) Coote refers to the child-to-parent relationship, or 'charade', in which the public and expert systems engage. Reliant on expert systems to 'answer [its] questions and protect [it] from the hazards of life' (Franklin on Coote in Franklin, 1998: 7), whilst at the same time being patronised by them, the public may react accordingly: 'If the public are treated like children, we may well behave that way' (Coote, 1998: 128). It is in this context that another limitation of blogging - in London - emerges: bad behaviour. 'The blogging world can be quite shouty' (London blogger Matthew), and indeed, some London blogs are characterised by their scathing commentary³ on expert systems and/or individual expert system representatives, prompting some who might otherwise pay attention to and interact with blogs to disengage. Blogging of this sort was described by expert system representatives as follows:

some of [the attacks] are personal, [my colleague] is basically one of the greatest, most passionate [people] you'll ever meet, and if you want anyone heading up [a department] you're going to want it to be him, but some of the bloggers have personally attacked him and other [colleagues] and that's when I get a bit mad (London city official Elisabeth)

there was once a call to action on [a particular blog] to make someone in my team 'toast' at a conference [laughter] (London city official Annabelle)

most - not all - bloggers sit down and just criticise (London city official George)

it is very clear there has been some fairly vociferous blogging [...] and snide comments [...] we were up against some very abusive blogging (London campaigner Rory)

³ See four examples: 1)' National embarrassment: TfL builds cycle lane to Olympics. Two people killed already. Tells cyclists not to use it' (Williams, 2011f) 2) 'The Evening Standard ties itself in double yellow knots' (AsEasyAsRidingABike, 2012) 3)' In denial: the strange fantasy world of the London Cycling Campaign' (Freewheeler, 2010a) 4) 'Is the CTC helping or hindering bike use in the UK?' (the Alternative Department for Transport, 2012).

[Freewheeler]⁴ picks people out individually and then hammers into them [...] I don't think it's very ethical [that his blog's comment function is disabled, which means that readers cannot respond to his claims], especially when you know, you're that vehement in your criticism, pretty cowardly I would say [...] I take him quite seriously, I find him quite annoying, some people just wouldn't give two shits about him, it's almost like a badge of honour if you've been personally maligned by him, I haven't, but you know (London campaigner Mark)

don't get me wrong, I think it's really important to critique, to be critical of organisations [...] I don't think that everything [we] do [...] is fantastic either [...] but in the blogging world, with the cycling community, it's such a 'I'm right, you're wrong, my way, my way' [...] I'd hate to be a campaigner in the UK [laughter] [...] the blogging community is very powerful [...] [laughter] don't get on their bad side especially if it's in London (European campaigner Jacob)

on blogs, discussions tend to heat up quite quickly and that's not always good for the discussion [...] it's quick, you don't have to think before you type things, you can be anonymous if you want and sometimes that's not productive (European campaigner Mathias)

if you do anything in the English-language then the cycling world can go absolutely ballistic [...] I've been on the receiving end of it [...] you can find [...] stuff saying basically [I'm] an idiot [...] it is very challenging if you actually think you're amongst friends and you get sadly bruised [...] to discover my name on 10-15 other blogs saying '[this person] is an idiot, is incompetent, should never be allowed a position of authority' is fairly bruising [...] you've got to assume that if that's the way you are treated [by those with whom you] ought to be roughly on the same side-ish, then frankly, how does it feel being a relatively junior engineer in a local authority? how does it feel being a minor politician who says 'we'll put a cycle lane in' and the cycling community gets up in arms and says that cycle lane is rubbish? probably rightly so, but the tone and style and that kinda stuff at times to me is unacceptable [...] at a professional level, I've worked [...] in industry, I'm used to trade unions, I've been through industrial disputes, [but] I have never come across behaviour like the online blogging community in cycling and the personalisation of it, truly awful [...] I don't mind their opinions, but the personalisation of it makes it a bit the Wild West [...] funnily enough there are Twitter attacks [...] but in general I find it a slightly less-threatening world to go into, the bloggers [...] are more... I mean, I should be honest, I've got, I've got, you know, a couple of wounds⁵

⁴ See for example: 'Ben Plowden and more TfL fantasies of a shift to cycling in Outer London' (Freewheeler, 2010b). In contrast to campaigner Mark's criticism above, some of Freewheeler's peers expressed their respect for his particular approach to blogging (see also sections 5.4 and 6.1). For example, London blogger John: 'when someone writes with that sort of anger and vitriol it's not without reason and it is like a breath of fresh air [...] I liked what drove him because [...] that's not without passion, and it was superb I was called a 'Freewheeler collaborator''. Likewise, London blogger Matthew: 'there was this delicious relish of being accused of being Freewheeler myself, it was this terrible kind of Levinson Enquiry level of paranoia about 'who is the spook amongst us?' (Freewheleer's 'real' identity is unknown; he blogged anonymously).

⁵ For reasons of anonymity, I have not included this participant's location, profession or pseudonym.

One consequence of such blogging and understandings of it is *disengagement*. That is, in contrast to the notion that bad access point encounters with expert systems may lead to *the public's* 'resigned cynicism' and disengagement (Giddens, 1991a: 91), this section suggests that *representatives of expert systems* may too become cynical and disengage following bad experiences with blogs as access points to the public. Abusive blogging - in contrast to that which is less 'personal' (Elisabeth) and more 'thoughtful' (Rory), 'critical' (Jacob) or 'constructive' (George and Elisabeth) - prompts some to stop paying attention to blogs or to limit their interaction with them in other ways:

I don't follow any blogs anymore, I think because I was so close to some of the things, I used to follow the blogs [...] and then I saw, I don't know, some constructive criticism [...] and then some completely wild criticisms [...] I took it too personally and I thought 'no' (London city official George)

we just balk because whenever we provide [bloggers] with information, they just turn around and use it as ammunition [see next section on professionalism] [...] it's got to a stage where any comments that could be constructive, even if they are constructive, people just aren't going to listen to them anymore because... it could be like the boy who cried wolf almost [...] colleagues used to react [...] [but] that is very much a one-way conversation now because [they] just won't engage anymore, they've just been burnt, so they're not interested (London city official Elisabeth)

when people blog, people are abusive in ways that they wouldn't be if they were face-to-face, for that reason, I stayed out of the debate [...] for quite a while, just because I thought this is just an online bear-pit of furious bloggers and I've got better things to do than engage with a few furious bloggers [...] when some of the bloggers were just being abusive, I just thought 'pfff, I've got better things to do' [...] they've had hardly a pip squeak of reaction out of us [...] [blogging] has, if anything, well one, it has triggered the debate, but in another sense, I think it has slowed down the process of really getting the debate under way in a sensible way [...] I would specifically pick out Crap Cycling and Walking in Waltham Forest [...] the sheer lack of integrity in that [blog] meant I don't want to, I just couldn't, I couldn't even be bothered to acknowledge you exist, I just left it at that, and in a way, by taking that approach, that blog actually slowed down our engagement in the debate rather than prompting us to get involved in it just simply because what I regard as the unethical behaviour of whoever was writing it (London campaigner Rory)

sometimes we have to be careful what information we feed [bloggers] just because they're so active and they're not so... [...] they lack [...] the political diplomacy [see next section on professionalism] that you sometimes need to get things done [...] we'd sorta stop answering [a particular blogger's] emails because [...] the next thing we knew he was publishing our emails to the media [...] even if I said 'please don't write or post this', they'll do it anyway and there's not much liability there [...] it's mad, that's the cycling blogging world, you can really just do your head in doing the rounds, I mean, you've got to step back and not take it personally and know where to even bother spending your time

[...] in the past we tried responding and then got in this never-ending debate of 'blah blah blah' and it took too much of our time, at the end of the day we were like [...] 'is it that bad of a deal?, is it going to ruin our reputation that much? probably not, it's probably not worth the time' (European campaigner Jacob)

it's a fine line you have to tread not to get people upset on blogs, and especially on those critical blogs, the only thing people want to do is get a discussion going but maybe that discussion doesn't end well for you, sometimes you just don't want to talk about it and that's really a problem we have (European campaigner Mathias)

One interpretation of this evidence is that disengagement corresponds to a lack of interaction, which corresponds to a lack of opportunity for blogging to make a difference. And yet, abusive blogging has evidently made a difference, albeit in self-limiting ways. That is, whilst having evidently succeeded in making noise and being heard⁶ (otherwise thought to be unlikely via instituted means, see section 5.1) abusive blogging creates new forms of exclusion; it becomes a new reason for the state and cycling's civil society⁷ - already regarded by some as exclusionary (see sections 5.1 and 5.3) - not to pay attention to, interact with, or by consequence, represent the needs, wants and values of the (blogging) public. Like other types of mobility, the mobility of information is uneven, resulting in unintended consequences, risks and immobilities (Freudendal-Pedersen, 2009). That is, just as an unintended consequence of expert systems' perceived inability to deal with the unintended social and environmental consequences (risks) of transport (as physical mobility) is (abusive) blogging, the disengagement of expert systems from blogging (as the mobility of information) is an unintended consequence of blogging's perceived abuse.

Acting on risk is thus shown to itself be risky: when 'people act with knowledge of risk, they change the risk' (Ericson, 2006: 349). The 'new distribution of possibilities' brought about by individualisation corresponds to a simultaneous 'new distribution of *impossibilities*'; 'what for one individual [such as a blogger] is the overstepping or overthrowing of boundaries is for another [such as the representatives of expert system above] the setting of new boundaries and the

^{6 &#}x27;The blogs that tend to get most attention [...] have been making the noise and [...] are the most colourful rather than necessarily the more thoughtful '(London campaigner Rory).

[&]quot;He who shouts loudest shouts last', sometimes that's a necessity in that, as a consequence of that you [as a blogger] can rattle the cages of people who are used to their own status quo' (London blogger Matthew).

^{&#}x27;[With blogging] the loudest voices are heard the most' (European campaigner Jacob).

⁷ In the case of cycling's civil society, abusive blogging publicly draws attention to the disparities in what should - in theory - be a unified movement, possibly weakening it even further (see section 4.3; Kriesi, 2004). That said however, see Dunckley (2013) who criticises the assumption that 'a united front' is necessary in order for cycling advocates to be able to make a difference, and moreover, who questions whether it may be establishment campaigners - and not bloggers - who are 'marching out of step'.

changing of the probabilities of various outcomes' (Beck et al, 2003: 24-25; emphasis mine). In this way, and insofar as the (blogging) public remains *reliant* on the very systems it is shown to exclude, bloggers, as 'agents of individualisation', are also shown to be 'its victims' (Beck et al, 2003: 25). And whilst the previous chapter presented evidence of blogging, as an external difference, 'new agent' (Beck et al, 2003: 14) and source of turbulence, being absorbed by expert systems, the evidence above suggests that (abusive) blogging⁸ may also be rejected and met with attempts to stabilise or immobilise; 'to restore the authority of the old boundaries' (Beck et al, 2003: 20). In other words, 'movement actions trigger chains of events which [...] sometimes provoke backlashes and other unintended responses' (Fuchs, 2008: 279 quoting Crossley, 2002).

Section Summary: Blogging as Abusive

Some of the above comments suggest a change in the reception of blogging *over time*; doors (boundaries) that blogs had once pried open have since closed⁹. Blogging that is thought to be unconstructive, unethical, unprofessional, undiplomatic, or indeed, immature in its appeals to expert systems is de-legitimised; deemed unworthy of paying attention to, even if it once was. In contrast, the suggestion seems to be that professionalism and diplomacy are the marks of experts and their systems (affirming their legitimacy) and that bloggers are expected to abide by certain rules if they want to play the game¹⁰ (despite an apparent temptation to think such rules do not apply to them). As such, this section alludes to the (blogging) public's ongoing reliance on expert systems, the subject of the next and final discussion section.

8.4 Reliance on Expert Systems and Expert Knowledge

This section argues that, for three reasons, the ability of blogging to make a difference is ultimately limited by the public's reliance on expert systems and expert knowledge. Technical and other professional knowledge is understood to be necessary, firstly for what it is, and secondly, for what blogging is not. Thirdly, it is recognised that the public's reliance on instituted forms of citizenship means that blogging on its own can only go so far (Isin, 2009).

⁸ Abusive blogging may result in generalisations and the risk that *all* cycling policy blogs get categorised and dismissed as abusive, thereby lessening their likelihood of making a difference.

⁹ The precise chronology of this evolution - from paying to *not* paying attention to blogs - is not clear, particularly as some of the participants cited in this section also spoke (elsewhere in their interviews) of blogging in positive terms and as something worth paying attention to. One possible explanation for the change of tune is that when second-order side-effects such as blogging 'first appear, they are ambiguous and incalculable' but become more predictable over time (Beck et al, 2003: 14).

¹⁰ London city official Samantha, for example, spoke of having to teach bloggers 'the rules of engagement'.

Firstly, representatives of expert systems defended the need for the specific types of 'technical accomplishment or professional expertise' they provide (Giddens, 1991a: 27). For example, when questioned about the ability of lay advocates to produce alternative road designs (as, for example, the London Cycling Campaign¹¹ had recently done in response to 'the lack of vision coming from TfL and the mayor's office', Cavenett, 2011), London city official George likened the situation to the sense of him performing medical surgery without proper training:

this is my problem with people that are not experts trying to do designs, I am sure nobody would appreciate me trying to do surgery [...] people are not aware of how many things take place to take things off the ground

In George's view, just because knowledge boundaries have opened and more people have more access to more information and more information technologies does not mean that they can or should attempt to use them in certain ways; expert knowledge is needed however underappreciated it may be. Incidentally, and illustrative of the fact that everyone (however skilled) is dependent on someone, George suggested that rather than distrust or blame the technical experts, the public should apply pressure on the government (see also Nathan's comment below), which ultimately calls the shots, controls the pursestrings and may actually prevent such experts from 'act[ing] on all the things most [of the city's] engineers and transport planners would like to do'. Likewise, London transport consultant Nigel and New York city official Nathan effectively argued that it is all very fine and well for the (blogging) public to draw attention to transport problems, but to actually solve them requires technical judgement that the (blogging) public simply does not tend to have:

these people talk about it as if it's black and white, '[cycling in the UK] must be like in the Netherlands, that's the way to do it' [...] there's huge amounts of subtlety and someone coming in saying we must just provide Dutch infrastructure doesn't understand the subtlety of cycle design, cycle infrastructure, cycling planning... [...] a lot of these bloggers probably don't understand the subtlety (London transport consultant Nigel)

you do read the comments on a Streetsblog post and people sometimes propose things that are very, very technical and you're like, 'I don't know if that would actually work' [...] I mean, things work great when citizens are advocating for positions to government [see George's comment above] and maybe not for exactly, specific outcomes [...] this is less about cycling but, some people in a residential neighbourhood will say 'we want a stop sign on this street' and they're asking for something really specific, the problem they have is that people are speeding and you have to sit down and say 'well, a stop sign isn't actually going to prevent people from speeding, they'll stop and

¹¹ Although for the purposes of this project the LCC is an expert system, in the context of George's comment it is not.

speed up again, what you need is maybe a speed hump or maybe the intersection needs to be narrowed or any number of other solutions', and I think of it as being the job of the agency to have all these solutions and help citizens pick or know which ones are appropriate [...] I think it's a more common [...] occurrence for people... to [...] ask for that very, very strongly, one solution, rather than asking 'what's in the toolbox to fix my problem?' (New York city official Nathan)

Although on one hand Nathan appears to belong to the second modernity school of 'there is no longer 'one best way' to solve every problem, but rather several equally valid modes of justification that operate simultaneously', he evidently also believes that the ability to determine which of those modes is/are valid is based on expert knowledge (Beck et al, 2003: 16). Moreover, there is a tone common to Nathan's remark about having to 'sit down' with and 'help' members of the public (as if to stoop to their level or teach them a lesson); Nigel's reference to members of the blogging public 'coming in' with demands and suggestions (as if to interrupt an exclusive expert debate); and Leo's remark (below) about advocates 'breaking into' expert systems (as if they are not otherwise welcome)¹². There is, in other words, a tendency for experts to 'represent lay views on risk as ignorant' (Lupton, 2006: 15). Exclusions based on 'a hierarchy between experts and laymen' are implied, despite claims that, in second modernity, knowledge has been de-monopolised (Beck et al, 2003: 5). Other participants however acknowledged such barriers more explicitly, whilst also defending them as necessary (however much they may 'duck democracy', Leo, below) in order for experts to cooperate and build on the knowledge of their peers (indeed much like bloggers and those with whom they cooperate, see section 6.2). Indeed, it is precisely because bloggers do not 'inhabit' - or indeed, move - in the same circles as instituted actors that their ability to make a difference via blogging is limited, according to European campaigner Leo. The mobility of information and the corresponding distribution of possibilities are evidently uneven; opportunities for some to mobilise come at the expense of others'; however much knowledge foundations and boundaries have evolved in second modernity, they remain all the same:

I don't think we should ever imagine that in cycling terms [blogging] is a political force in the UK, the bloggers are not at that level [...] institutionally, [...] we would go more towards the institutional advocates than we would towards the bloggers [...] because there are checks and balances in their position and how they've developed their policy [...] the politics and the networks and the exchanges and the international exchanges between cities are not a world the advocates [including bloggers] inhabit [...] the officials at Transport for London will talk to the officials in New York [...] and one of the reasons they do that, I'm not going to say 'to duck democracy', but in practical terms, you know, they can speak engineer to engineer and politician to politician, and say 'what did you do?' (European campaigner Leo)

¹² See blogger Dunckley (2013) on 'small', 'monocultural' groups 'who invite each other to discuss cycle campaigning behind closed doors'.

I know all these people and we meet once in a while and we have the conferences, we have a network [...] an international network of people who try to help each other [...] you can track the links from one city to another, from one expert to another (European transport consultant Thomas)

maybe where we as professional organisations operate in a slightly different sphere and we network with each other, but we don't network necessarily very directly with [those who 'are used to mobilising around' blogging and other internet media] (London campaigner Rosemary)

So whilst the comments thus far suggest that technical and other professional expertise is necessary *for what it is*, the second part of this section shifts to *what blogging is not*. That is, whilst the above discussion emphasises the apparent *superiority* (and therefore necessity) of expert knowledge, here the evidence begins to focus on blogging as *inferior*. Expanding on Lupton's (2006: 15) point that experts tend to represent the public's views on risk as 'ignorant', representatives of expert systems discredited blogging as small-minded, inaccurate, unaccountable and even dishonest. That is, in contrast to evidence presented in section 6.1, which suggests that the quality of blogging can be quite high (and expert knowledge low, or at least unreliable), the accounts presented here argue quite the opposite. Indeed, they suggest that only expert systems can be entrusted to produce reliable knowledge; blogging cannot be trusted or depended on¹³. London city officials Elisabeth and Annabelle, for example, implied that blogging can be quite petty insofar as the concerns it raises tend to detract from the bigger picture. Moreover, they suggest that it gets in the way of the more 'grown-up' debates they and their colleagues would otherwise be having (see Coote (1998) in the previous section):

the blogosphere activity around [Blackfriars, see section 4.4], and how a couple of individuals can really drive a single issue forward and take the focus away from the bigger picture and the bigger conversation, that's what we've really struggled with as policy-makers, how we can have a sensible and grown-up debate about the allocation of road space when there's so much anger out there? [...] the major bloggers [...] are very passionate about what they do and they do feel like they have a personal crusade [...] that's been a difficult battle for us (London city official Elisabeth)

you get small projects that come to represent bigger debates, you know, like rather than having big debates we always seem to end up having debates about something really small [...] for example, with Blackfriars, we're not having a debate about how should road space be used within London [...] we're having a debate about how 20 meters of the network should be used and that can be frustrating for us (London city official Annabelle)

¹³ See Marsden et al (2010) on the perceived 'mixed quality', over-abundance and difficulty of finding and filtering online policy information.

Others expressed concerns regarding the *accuracy* and *accountability* of blogging, particularly in contrast to professional journalism's perceived higher code of ethics. ¹⁴ Recall from section 7.1, for example, that one of the reasons London city official Robert met with a particular blogger was to set the record straight and 'correct some of the facts'. Robert went on to explain however that blogger 'misrepresented' their conversation on his blog, just as Robert's colleagues had warned: '[bloggers] can say that they've met you and then they can put whatever they like, they don't have the same kind of governance as a newspaper might'; they cannot be trusted. Likewise, London campaigner Mark and European campaigner Jacob contrasted bloggers to 'proper journalists':

[Freewheeler] comes up with all kinds of stuff, he's not very good at lateral thinking about stats, he just sees everything at face value, he doesn't really do much analysis but he speaks with a lot of authority, which is annoying really, he'd make a [...] terrible journalist [...] he had so many inaccuracies (London campaigner Mark)

the difference between blogging and a newspaper is there's accountability, I mean, what you say when you blog, you have a lot less... who cares if you are... a lot of bloggers will say stuff that perhaps they weren't meant to say or they haven't checked the facts, I mean, a proper journalist, that's their job, journalism is different from blogging for that reason (European campaigner Jacob)

Thus, rather than trust and value blogging for the qualities blogging is typically trusted and valued for (candidness, subjectiveness, independence, spin and unique, critical and regular commentary and analysis on highly-specialised topics, see section 3.1), Jacob and Mark, as well as Samantha, George and Rory (below), are more concerned with 'controllability, certainty or security' despite the very notions - 'so fundamental to first modernity' - having 'collapse[d]' in second (Beck and Lau, 2005: 526). They (with perhaps the exception of Rory, see below) do not seem to subscribe to the notions of peer review and 'cooperative production' as online quality control mechanisms (see section 6.2; Fuchs, 2008: 164), perhaps because they themselves do not interact with or participate in such processes. Underlying their comments seems to be the point that, where blogging cannot be entrusted to 'pursue honest enquiry' (Rory), the truth or the facts, expert systems can. That is, the de-legitimisation of blogging creates a job vacancy, so to speak, that apparently only expert systems can fill; de-legitimising blogging implicitly legitimises expert systems, their knowledge and control mechanisms; relative to blogging, expert systems can, some would argue, be relied on after all:

my reservation [is about the] control of these individuals, who verifies accuracy, who resolves conflicting views? [...] blogging can allow for empowering and challenging structures, but as with any

¹⁴ Indeed one reason why comments from New York and about media as an expert system are relatively absent in this section may be because Streetsbloggers are generally regarded as journalists and thus Streetsblog, as a form of journalism (see section 4.4).

tool can be used for the wrong reasons [...] my main issue with blogging is accuracy of facts [...] I don't take the information from a blog as accurate, at all (London city official George)

I take what people write [on blogs] with a pinch of salt, particularly when attributed to senior officials who tend to be very careful about what they say, we have no way of knowing if what someone attributes to an unnamed mystery 'senior official' is true (London city official Samantha)

the blogosphere is a place where good, reliable debate can happen more quickly, where people can dig out information and then spread it, good information, information that was otherwise being kept under wraps can be unveiled, proclaimed, debated, analysed, statistics crunched, all of that good stuff can happen much more quickly than before, and lies can also spread more quickly than before, there's a whole load of disinformation, some of it unwitting, some of it entirely wilful and it's very difficult to know which is which, it's often very difficult to know [...] to what extent people are out there pursuing honest enquiry after the best answer to a question and to what extent people are taking lazy and simplistic approaches to debates and being downright dishonest (London campaigner Rory)

The third and final limitation of blogging relates to the public's reliance on *instituted* means of citizenship or making a difference (e.g. voting, taxpaying, writing to elected representatives, participating in public meetings, consultations, demonstrations and civil society organisations, see section 5.1). That is, blogging *alone* can only go so far given the public's reliance on institutionally-prescribed methods of aggregating the 'individual self-expressions into a coherent [...] 'public voice", however ineffective those methods may be (Coleman, 2005: 278). Blogging does not have an official-mandate to represent (see section 7.3), and moreover, like the child in Coote's (1998) analogy (see previous section) cannot be trusted to act responsibly on its own, and so relies on *rule-* or 'decision-making structures' (Samantha):

someone that's blogging, their sole opportunity for affecting decisions about cycling in London isn't just the blog, there's speaking to their borough council [...] people go along to council meetings and listen in and make comments and influence that way [...] social media is an interesting and powerful additional resource that's available but there are still traditional decision-making structures that get followed through [...] probably the most successful people are the people that do both (London city official Samantha)

[blogging] is probably just an extra thing, I think you need the process, you need the physical demos, you need people writing to the papers and writing letters to their MPs in the traditional way (London blogger Daniel)

one of the things I've been wary of is that one can write a blog and consider that to be campaigning, you know, 'I've expressed my frustration in the blog therefore I don't need to write the letter to TfL', well no (London blogger Chris)

Section Summary: Reliance on Expert Systems and Expert Knowledge

Ultimately, this discussion ends very much as it began in Chapter 5, with the point of this section being that the public remains reliant on expert systems to mitigate and help them cope with risks; the late modern individual 'remains [...] unable to escape the power of definition of expert systems, whose judgement he cannot, yet must trust' (Beck, 2006: 336; Beck 1992; Giddens, 1991a; see section 2.2). The chapter conclusions that follow elaborate on this dependence.

8.5 Chapter Conclusions: Plus Ça Change: Reliance and the Fallibilities of Policy Blogging

One of the goals of this chapter, and indeed the previous three (as set out at the start of Chapter 5) was to 'decipher', as Beck and colleagues (2003: 3) suggest, 'the new rules of the social game'. That is, with knowledge boundaries said to be opening in reflexive, second modernity, foundations shifting and 'old certainties, distinctions and dichotomies [...] fading away', 'what is taking their place'? (Beck et al, 2003: 3)

One interpretation, judging by the evidence in this chapter, is that, despite most everything else the game's players, equipment, tactics and field of play, so to speak - having changed, ultimately, the 'rules' seem to remain very much the same. In order for new rules to emerge because of blogging, synergies, collective properties, objective knowledge or 'alternative optimization strategies' would need to develop and be mandated by expert systems - 'squared with the dominant model of rationality' - on which the (blogging) public still relies (Beck et al, 2003: 16; Fuchs and Hofkirchner, 2005). That is, despite their mutual-dependency (i.e. the public is reliant on expert systems to mitigate transport risks; expert systems are reliant on the public's trust in their ability to do so) and the opening of knowledge boundaries, the relationship between the (blogging) public and expert systems is unequal, with the former 'forced to mistrust' (Beck, 2006: 336) the latter, whose self-preservation also depends on maintaining the status quo, or old rules, boundaries, 'certainties, distinctions and dichotomies' (Beck et al, 2003: 20). Thus in contrast to the evidence presented in the previous chapter, in this one blogging is shown to be excluded from and de-legitimised by the ruling order, including for some of the same reasons the (blogging) public delegitimises it (i.e. inefficiency, unrepresentativeness, abuse of power, see Chapter 5). As such, and despite having made a difference to the ways in which 'the game' is played, ultimately the

(blogging) public is 'alienated from expert systems but ha[s] nothing else instead' (Beck, 2006: 336). There are no genuinely new rules, although the game itself has changed.

Chapter 9: Conclusions

Having come this far, now what? And moreover, so what? That is, where to go from here, and what does it all mean? The purpose of this brief concluding chapter is to look both backwards and forwards by highlighting three key themes that span this thesis (communication *about* transport; computer-mediated knowledge and communication; risk as the subject of transport communication), reflecting on some of its limitations and suggesting three recommended paths for future research to take from here (computer-mediated communication as data, policy boosterism and cycling's inter-urban relations).

9.1 Key Themes

Moving Beyond Cycling's Physical Mobility

One of the key debates this thesis has sought to advance is the *interaction of multiple mobilities*. This is supportive of calls for research to shift away from analysing any one mobility type in isolation, separately from others on which it depends (Urry, 2000). Central to such debates are two types of mobility in particular: *transport* (the physical movement of people and objects) and *communication* (the increasingly virtual movement of symbolic information). Although long intertwined, their relationship has evolved from communication's dependence on transport or physical proximity; to its de-materialisation, growing independence and the distinction between it and transport as two fields of study; to the 'increased digitisation' of physical mobility (Dennis and Urry, 2007: 2) or it becoming more defined by communication and hence a renewed interest in studying their interdependence (Hannam et al, 2006; Hanson, 1998; Morley, 2011; Packer, 2008; Sheller and Urry, 2000; Sheller and Urry, 2006; Wiley and Packer, 2010). At the intersection of transport and communication, physical and virtual/digital relations, is this project's concern with blogging about cycling-related transport policy.

By relegating the typically-foregrounded physical mobility of cycling in favour of the mobility of information and communication *about* it, unique findings emerge. Beginning with the question 'why blog?', Chapter 5 demonstrated that, in contrast to existing framings (see section 2.2), *transport or cycling citizenship may be enacted whilst one is physically immobile*, although mobile in other (virtual and communicative) ways. This chapter also showed the first signs of how blog users become policy, media and civil society *actors in their own right, by virtue of their ability to publish information*, which then becomes a basis of communication or social interaction. Indeed, it is through *communicative interaction with expert systems* that blogging is argued, in Chapter 7, to

make a difference to institutional practices and routines at the most fundamental level. Chapter 6 meanwhile illustrated how the communication mediated by blogging can result in *different types of knowledge than that acquired and applied through physical movement*. That is, although the public's understanding of transport and cycling is most commonly framed as experiential (see section 2.3), this chapter provided evidence of blogging mediating individuals' more abstract or conceptual understandings. Similarly, this chapter illustrated that the *mobilisation of policy knowledge is not dependent on policy actors' physical mobility* (i.e. 'policy travel', 'policy tourism', conferences and other face-to-face encounters), in contrast to common framings (see section 2.1). Policy mobilities are rather shown to be more fundamentally a matter of actors' *interaction*, which may be mediated virtually. Coming full circle, Chapter 8 illustrated that there are limitations to the effectiveness of using blogs to communicate about cycling-related transport policy, not least because some of that communication is shown to *produce exclusions*.

Having made it a goal of this project to move beyond the foregrounding of cycling's physical mobility and having come this far, it must be acknowledged that without physical mobility, there would obviously not be any 'cycling' to begin with. If that movement or the physical proximity it enables remain however the predominant yardsticks for approaching cycling in a genuine *mobilities* sense the word, then social relations mediated by cycling's *other* mobilities, such as those documented here, will continue to remain unaccounted for in theory as they once were - according to Chapter 5 - in practice.

Computer-Mediated Knowledge and Communication

This thesis has contributed to social science understandings of *internet-mediated* knowledge and communication. In addition to helping to bridge the gap between studies of transport and studies of communication, it has also advanced what we know about a very particular type or medium of communication: *policy blogging*. This project responds therefore to suggestions outlined in the new mobilities paradigm calling for future research to examine the *technologies* of information and communication movement (Hannam et al, 2006; Sheller and Urry, 2006). It likewise supports Urry's (2007) point that 'the key issue' is not the *objects* involved in movement (e.g. bicycles, cars or computers), but rather, the 'structured routeways' via which they and not-necessarily-material units, such as information, move. This thesis helps to fill the 'internet void' in cycling research, as well as to build on the work of those interested in how the internet is changing our relationship to information and knowledge in societies and an age defined by and reliant on them to mitigate manufactured risks (Fuchs and Hofkirchner, 2005: 241; Fuchs, 2008; Fuchs et al, 2010).

Whilst Chapter 5 alluded to the desire for more or better knowledge being a factor in the decision of some to blog (e.g. in order to better engage with the state and transport (sub)politics; to publish more critical transport information than instituted media; to challenge claims made by cycling's civil society organisations; to arm activists and convert others), it was in Chapter 6 that blogging was shown *capable of producing knowledge*. Contra Fuchs (2008), who does not generally consider blogging one of the internet's 'cooperative' platforms, this chapter presented evidence of *specific synergies emerging* due to blogging. Technological affordances (i.e. hyperlinks, multi-media, interaction with Twitter, reader comments) and their use to coordinate offline social relations were shown in Chapter 6 to result in individual (subjective) and collective (objective) knowledge, as well as the mobilisation of policy knowledge from place to place. Blog-mediated knowledge claims were meanwhile shown in Chapter 7 to interact with expert systems and/or their representatives, and as such, to reflect *the evolving nature of knowledge and knowledge actors* as de-monopolised, diversified and more conflicted (indeed as suggested by risk society theorists, see section 2.3). On the other hand, Chapter 8 presented quite a different picture, including that of *non-interaction* and blogging being used less constructively.

Indeed, it is worth drawing more attention to the fact that Chapter 8 tells a 'second story' of sorts in relation to the earlier empirical chapters, which largely present blogging in a glowing light. That is, there are two tales within this thesis - both 'the truth' - regarding the relationship between different types of mobility and stages of modernity. So although it is undeniable that information has become less dependent on physical travel and other 'traditional' methods of communication and control the more it has become digitised and computer-mediated, it is not entirely free; individuals remain - indeed perhaps even more-than-ever - reliant on expert systems as producers, gatekeepers and mobilisers of transport, policy and other knowledge. So whilst Chapters 5-7 demonstrated that blogging (including the media technologies it supports, e.g. imagery, hyperlinks) may be used to *enhance* and *critique* expert systems as the traditional channels of policy communication, policy mobilisation, knowledge production, cycle campaigning and transport citizenship, and as such, *to some extent* circumvent and replace them, Chapter 8 demonstrated that 'tradition' has not been supplanted entirely¹.

Hence contrary to the suggestion made by Beck and colleagues (2003) that 'new rules' are replacing 'old' ones at the onset of a second modernity, Chapter 8 suggests that, for this particular 'social game' anyway – cycling-related transport policy – the state, instituted media and cycling's civil society as traditional *rulers*, and hence the rules themselves, remain the same, although 'the

¹ Recall also participant comments in section 6.3 regarding policy tourism and the critical importance of (physically) 'experiencing' transport policy in order to understand it; there is no replacement for 'being there'.

game' itself has evidently changed. Blogging is not, in other words, so much a matter of the virtual or digital mobility of information about transport *replacing* more traditional methods and systems (i.e. imposing 'new rules') than it is a matter of their *interaction* and the subsequent emergence of *difference*.

Indeed anyone reading this with hopes of finding conclusions along the lines of 'blogging changed a specific transport policy' or 'the types of evidence that count in policy circles have changed due to blogging' or 'bloggers have blurred the expert-lay distinction' are likely to be disappointed. Indeed an apparent want of such a type of response is what London transport consultant Nigel seemed to be driving at when stating 'tell us about examples where something has actually happened as a result of the blog', I'd like to know [...] what's happened as a result?' Complex systems are simply irreducible as such (as first outlined in section 2.3) and any suggestions otherwise would be beside the point. Moreover, it is important to keep in mind that the evidence presented in this thesis really does represent a snapshot of a very brief moment in time. System change on the other hand is the result of both interaction and iteration (over time). So whilst it would not be accurate to conclude that blogging has resulted in a specific systemic change, it has clearly resulted in 'difference' to routine practices due to it mediating the interaction of numerous elements (as suggested in Chapter 7). Whether those interactions are iterated over time and how they evolve in relation to other ones remains to be seen.

Transport and its Risks: the Subject of Public Debate in Late Modernity

This thesis also advances debate by foregrounding specifically the *late modern context* of contemporary cycling. As such, it addresses the relative lack of sociological studies that a) frame contemporary mobility and transport squarely in relation to modernisation (Rammler, 2008) b) respond to the 'key' mobilities question of the times: 'How do people realize connections and exchange in a global society of networks, scapes and flows?' (Kesselring, 2008: 80). Although characteristic of the paradigmatic shifts in social structure said to have emerged late in the twentieth century (Bauman, 2000; Beck, 1992; Castells, 2010; Giddens, 1991a; Urry, 2000), the notion of 'networks, scapes and flows' is somewhat at odds with the physical and associated material dimensions of cycling, which remain the focus of much of its research (see section 2.1). By positioning cycling in relation to a particular interpretation of late modernity - the *risk society* and *reflexive modernisation* theses - this project considers the social and environmental risks of modern transport as ever-increasingly *the subject of communication and public debate*.

A key tenet of the risk society and hence this project is *reflexivity*, which, as Chapter 5 demonstrated, partially underlies the decision of some to blog. Blogging is, in other words, a

means for some to reflect critically on transport and to mobilise those reflections into action (Beckmann, 2001b). Indeed all the empirical chapters demonstrated how, in one way or another, reflexive mobility manifests via blog-mediated social relations. As such, this evidence supports another risk society tenet: individualisation. Individuals are, throughout the first three empirical chapters, shown to use blogging to claim rights - transport as a matter of lifestyle and quality of life - as well as to take personal responsibility for transport risk, rather than to rely (entirely) on expert systems, their representatives and instituted relations. Again, late modern individuals are shown to emerge as policy, media and civil society actors - not just passive consumers of transport as an abstract system, nor dependent subjects of the expert systems responsible for it. Contra dominant understandings of transport's 'new realism' - the heightened awareness of its risks - being the domain of expert policy actors and their instituted relations, these chapters provide evidence of the individualisation and sub-politicisation of cycling-related transport policy (see sections 2.2 and 2.3). Taken together, the above findings suggest that much has changed. On the other hand, as Chapter 8 concludes, in a way, nothing actually has. That is, whilst Beck (et al, 2003: 3) suggests that the emergence of reflexively modern risk societies implies 'new rules of the social game', the evidence here suggests that despite individuals' increased capacity 'to act', the public remains reliant; there are no genuinely new rules because the ruling order is the same. The game, however - its players, equipment, tactics and field of play - has evidently changed.

9.2 Project Limitations and Recommended Directions for Future Research

As with any research, this project's findings are a beginning, not an end. Nor are they without limitations. One aspect of this study's design worth re-reflecting on here is the inclusion of multiple field sites. Whilst my rationale for this approach is outlined in section 3.1, the effects it had on data collection and ultimately, the conclusions drawn, have not been addressed. With my main concern being the identification of common themes within and across London, New York and Paris (and less the unique circumstances of each place or making generalisable statements about all three cities, see sections 3.1 and 3.2), this study may reveal issues that also span other locations, topics and/or policy fields (e.g. internet-mediated citizenship, knowledge production and policy mobilities). Such breadth however comes at a price: limitations to the site-specific depth of the data collected and the generalisability of the conclusions drawn. Such limitations were compounded by my decision to follow networks and expand the number of initial field sites (see section 3.1). How best to account for such geographically dispersed data when each site did not always speak to others' key themes was a continual challenge during the writing-up phase of this research, and is reflected by the fact that, despite having made the effort to collect and analyse it, data from Paris and the secondary field sites are relatively infrequently cited in this document (as noted in section 3.1;

recall also section 3.3 on interviewing in Paris, which I would consider omitting as a field site knowing what I do now).

Alternative examinations interested in obtaining more in-depth or generalisable perspectives on policy blogging may therefore choose to focus on fewer sites; to forgo geographical boundaries altogether; or, to 'follow' blogging wherever it leads but without dwelling particularly on location. Alternatively, designs may take for their starting point a particular policy concept (e.g. history, governance, citizenship, policy knowledge, policy mobilities) and examine how it intersects with blogging in different places (i.e. rather than to start with location and seek to reveal such concepts as this study has done), which may allow for a more comparative approach of distinct local features than this study permitted (see section 3.1).

Next I conclude with three recommended directions for future projects, the first of which expands on this one's interest in computer-mediated communication about cycling-related transport policy. The other two pick up on topics that surfaced whilst conducting this research: policy boosterism and cycling's inter-urban relations.

Data: Computer-Mediated Communication about Cycling

Publicly-available internet- or computer-mediated communication is, as Rajé (2007: 61) suggests, 'a valuable, although under-utilised, resource for the transport researcher'. Following on from this project and its concern with *user perceptions* of policy blogging as a particular type of CMC, an obvious next step would be to ask questions of CMC *as data itself*. In doing so, possible units and types of analyses vary. *Media-centred* approaches, for example, foreground one or more communication platform(s), as this project did with blogging and as others may do with new platforms as they become available, and/or with Twitter, listservs, apps, reader comments, even² websites. With their unique affordances, each fulfils different communication needs for users, whilst suggesting different data collection and analysis decisions, as well as actual research questions for researchers. Alternatively, one's aim may be to better understand a particular *content* type, such as imagery, text or hyperlinks. What, for example, could we learn from the study of 'helmet-cam' footage and those who upload videos of their daily commutes by bike³? What could

² Although 'static' (Bruns and Burgess, 2012: 202) in comparison to more interactive social media (characteristics that came to define and distinguish 'web 1.0' and '2.0', see Fuchs, 2008), websites should not be overlooked as worthwhile sources of CMC data. See for example www.cyclescape.org, whose users 'make a difference' by using the site as a medium to raise awareness and find solutions to 'cycling issues'.

³ See for example: 'Snarling face of road rage man filmed by cyclist' (Evening Standard, 2011); CycleGaz's Youtube channel (n.d.) where one can watch his 'experiences of cycling in London'; 'Self-styled cycling superhero or London motorists' public enemy number one? Vigilante biker names and shames errant drivers using SEVEN video cameras mounted on his helmet and bike' (Crossley, 2014); 'Every day, Lewis

examining 'transport photography4' tell us about the representation of transport systems, policies, concepts, values, issues, places and indeed the people behind the camera lenses and computer screens? What are, in other words, the visual discourses of cycling as they are mediated online? (recall also section 6.3 on the under-researched role of imagery in mobilising policy) In terms of text meanwhile, transport narratives could be analysed through a close reading of blog posts or other units, whilst co-occurrence analysis (i.e. of words that keywords are most frequently next to) would offer a more nuanced picture of debated concepts than keyword frequency alone, which itself would give some indication of important topic areas (Bruns and Burgess, 2012). Hyperlink analysis would moreover reveal CMC relational structures - social networks - by tracing in-bound and out-bound hyperlinked flows between units. By identifying these mobility patterns, sources could be interpreted as more or less key informants (Bruns and Burgess, 2012). The temporal aspects of any of the above approaches or variables could meanwhile be foregrounded so that the focus becomes, for example, changes to keywords or linking patterns over time. How do cyclingrelated transport policy networks and/or debates evolve, in 'real time' or during another given period, such as before and after certain 'real world' events, such as a cyclist dying as a result of being hit by a motor vehicle, the launch of a particular government policy, report by instituted media, campaign by civil society or countless other possible scenarios?

Combined network and content analysis is, some argue (e.g. Bruns et al, 2011; Lindgren, 2012), preferable to either in isolation because in-depth analysis of CMC content is not suited to capturing its other unique characteristics (volume, speed and hyper-connectedness), whilst methods that are capable of handling 'big data' are likely to strip away important contextual meanings. There are 'many opportunities' (Bruns et al, 2011: 4) for correlation and triangulation using different CMC and offline data sources and types of analyses. Indeed the term 'recipe' is used by some (see IssueMapping, 2012) to specify which combinations of the ever-increasingly available digital 'tools, approaches and techniques' will produce the evidence required to address specific types of research questions. Such 'recipes' could be followed, for example, in order to map popular issues and knowledge controversies within CMC about cycling-related transport policy (see Latour's MACOSPOL (n.d.) project aimed at facilitating the mapping of scientific and technical controversies).

One point of caution Bruns and Burgess (2012: 28) highlight (and I support based on firsthand experience, see Appendix B) is the ease with which researchers of CMC can produce 'results' (e.g. statistical outputs, data visualisations) using automated data collection and analysis tools (e.g. web

Dediare - AKA Traffic Droid - captures hours of footage that documents traffic infringements on London's roads' (Cooper, 2014).

⁴ As just one example, see blogger Freewheeler's (2012) use of transport photography to support his written arguments.

crawlers, concept locators, mapping software) without necessarily understanding the 'inner workings' of those tools and hence what the 'results' actually mean. In other words, there is a risk that those keen to learn more about cycling-related CMC use such tools as 'black box technologies' as long as they 'produce outcomes that 'look right" (Bruns and Burgess, 2012: 6), despite their numerous shortcomings (see Bruns and Burgess for a detailed discussion on the problems of most web crawlers for analysing hyperlinks within blogs) and instead of seeking training or recognising such situations as opportunities or 'call[s] to form interdisciplinary research teams' (Bruns and Burgess, 2012: 7).

The bottom line here is really to suggest, as Kozinets (2009: 3) does, that it is no longer possible to continue providing truly 'meaningful portrayal[s]' (Kozinets, 2009: 3) of contemporary social phenomena (such as cycling) without taking the internet into account. Of course that is not to say all investigations of cycling necessitate a CMC component. There is however, I would argue, some making up to do for lost time. As Kozinets (2009: 68) argued already five years ago, computer-mediated communication and social network formation 'has passed - or very shortly will pass - into the realm of the status quo, the way that our society simply is [...] researchers who ignore this reality will find their work increasingly passed by, rendered and judged irrelevant'.

'Boosterism' of Cycling-Related Transport Policy

'An avid bicyclist' who likes to 'flaunt' his 'green credentials' and whose proposed plans to design neighbourhoods 'to encourage walking, cycling, and transit use instead of auto-dependency' is central to his 'Greenest City Initiative' ... The picture McCann (2013: 5, 6 and 11) paints of Vancouver's former mayor alludes to transport being used 'to market a particular vision' of urban governance. Such contexts and concepts - what McCann goes on to frame as policy boosterism remain under-explored in the literature on cycling, which instead seems to largely accept or acknowledge urban cycling's elevated policy position rather matter-of-factly, as a result of growing concerns about the climate, congestion and health (e.g. Golbuff and Aldred, 2011; Horton, 2007; Spinney, 2010; see however Cupples and Riddley, 2008). This is not to doubt those claims (i.e. that policy-makers are responding rationally to a heightened awareness of modern transport/automobility's risks), but rather to note that such accounts stop short of actually unpacking the official discourses and representations that have come to be associated with cycling in cities (see section 4.1). On one hand this relative neglect is remarkable given how common contexts such as the one McCann describes above seem to have become. On the other hand, perhaps it is unsurprising given that cycling is such an (arguably) obvious response to social and environmental risks that its touting as such seems to hardly merit a second thought. Alternatively, perhaps the relative neglect is a matter of scholars' 'strong beliefs about the nature of cycling'

resulting in them 'downplay[ing] those aspects of it that they do not like', including cycling possibly being appropriated for political gain (as suggested in section 4.1), or as a late (as early) modern-day 'status symbol and upper/middle class plaything' (Oddy (2007: 99); see Steinbach et al (2011) on cycling signifying 'bourgeois' sensibility and distinction; recall London city official Samantha's efforts to make cycling 'aspirational' as presented in section 4.2)⁵. Ultimately, there is seemingly more going on than policy-makers reacting rationally to risk. One way of conceptualising that something more and opening up cycling research is through the lens of policy boosterism.

Cycling's Inter-Urban Relations

With its overwhelming interest in cycling's *physical mobility* (see section 2.1), existing literature largely frames cycling and the social relations constituting it as *local* practices. That is, with a focus on topics that foreground one or another combination of earth, man and bicycle machine (e.g. the suitability of road infrastructure for riding a bike, the bodily experience of riding a bike in a given location versus another), studies tend to pay much less attention to cycling's other mobilities, and hence other scales, including the *inter*-urban. This is important given that urban cycling (as suggested above and in sections 4.1 and 4.2) forms part of policy boosterism strategies and that policy knowledge about it is clearly being mobilised from place to place (city to city). The relative neglect of the inter-urban is not entirely surprising however given that, in contrast to early modern cycling characterised by 'progress and flight' (Harmond, 1971-72), late modern cycling may indeed, for some, represent something of the opposite: 'a less dispersed world where people move around sustainably'; a means of escaping our 'restless hypermobile lives' (Horton, 2005).

Future projects may wish therefore to trace inter-urban relations themselves, to examine their mediation, or indeed, their absence. This could include *state-instituted* inter-urban relations (or lack thereof), with policy boosterism again offering a potentially-useful lens through which to consider 'interconnected sites' of policy-making and the 'forces and connections' holding them together'; 'how urban policy actors engage with global communities of professional peers'; 'how policies and policy knowledge are mobilized among cities' (McCann, 2013: 5 and 19). Alternatively, future work could approach cycling's 'inter-urban' from the perspective and practices of *civil society*. Like Horton (2005), I cannot help but 'get the feeling that somehow, somewhere, there's an irresistible global movement still to be unleashed'. Given that has not happened however, despite 'universal' challenges (i.e. social and environment risks, transport itself as a practical problem) and the furthering compression of time and space, one may ask *why do urban movements concerned with*

⁵ See also 'A bronze statue of David Cameron on a bicycle has been sold for about £25,000 at a black-tie gala run by a secretive organisation that raises money for Conservative candidates' (Syal, 2014).

transport tend to remain localised⁶? What connections do (and do not) take place amongst cycling's geographically-dispersed campaigners and activists and why? Indeed, future projects could test Horton's (2005) suggestion that, in contrast to early modernity when the bicycle represented the breaking of barriers and expansion of scale (e.g. 'an enlarged public sphere including women, a countryside accessible to all'), today it has become symbolic of the 'elevation of 'the local'; a means of getting 'to know the local'; 'a kind of glue, helping fix activists into the settings where for the most part they continue to live out their lives' (see also Aldred, 2010).

Other literature on contemporary social movements that might help to frame questions about cycling's inter-urban relations include McDonald (2002), who suggests a shift in analysis from notions of 'solidarity' to 'fluidarity', or from 'collective identity' to 'shared struggle for personal experience' and 'public experience of self'. As such, analysis of the relative strength of inter-urban CMC ties (i.e. hyperlink networks) and/or content analysis of how cycling policy in some places is represented and utilised by those in others seem fruitful avenues for future research. By paying more attention to *cycling's* multiple scales, scholars may even expand those of cycling research itself, opening up opportunities for collaboration, irrespective of researchers' physical locations and boundaries.

Ultimately, it could be said that research seeking to understand cycling as physical, local, embodied or materialised movement also produces it as such. In contrast, what this thesis has hopefully demonstrated is that beyond riding a bicycle, there really is more to the mobility of cycling. Lest we forget, we are living in truly extraordinary times; that individuals *can*, or even *want*, to engage to the extent that they do with the issues discussed in this thesis would not that long ago have seemed unthinkable. That they do makes a difference. How that difference will evolve, how individual components will interact going forward, is impossible to say. System change is one possibility. Another is that this is all just fleeting and, relatively speaking, inconsequential. Indeed, as two London bloggers commented, 'perhaps ultimately we [bloggers] are a speck in the wind' (Andrew); 'all of 'this' might just be hot air and come to nothing, all will be dust' (Matthew).

⁶ Whilst there are organisations that span regions and nations (e.g. League of American Bicyclists, European Cycling Federation), none represent the cycling public on an inter-urban scale.

Appendix A: Examples of Cycling-Related Transport Policy Blogs

BLOG NAME	Extracts from each blog's 'about' page (unless otherwise stated)
LONDON	
The Alternative	This site is not intended to personally insult those who work at the UK's Department
Department for	for Transport or other transport authorities, though it is intended to prod them,
Transport	criticise them, and make them think about what it is they are doing.
As Easy as Riding a	Well it should be, shouldn't it? I'd like to see more people riding bicycles in Britain []
Bike	I used to be a relentless optimist, holding the belief that cycling is just such a
	naturally brilliant way of getting around that, sooner or later, everyone else is going to
	realize it [] Maybe it would also take congestion getting worse, or the cost of
	motoring to increase, or a little bit of positive gloss about how cycling is wonderful, or
	just enough people taking up cycling to tip us over the edge, to create a presence on
	the road – but, in short, I thought it would happen all by itself. I've changed my mind.
	I think, more realistically, we should listen to the reasons people give when they say
	why they don't cycle. Like the fact that it's not often convenient to use a bicycle,
	compared to using a car. Like the fact it's not really very safe, compared to a car
At War With the	On the 11 May 2010 [] a coalition government of the Conservative and Liberal
Motorist	Democrat parties was formed. With two parties having to negotiate and compromise,
	many ministerial candidates had to settle with portfolios that they did not especially
	want. One of these was the secretary of state for transport, Phillip Hammond, a Tory
	treasury man with no understanding of any form of transport except the road that his
	Jaguar takes from his Surrey constituency to Parliament Square. Upon accepting the
	transport portfolio, Hammond announced that as transport secretary he would end
	Labour's War On The Motorist. By announcing the end of a tabloid fantasy — not
	only had Labour failed to adequately tackle the problems of car and road-haulage
	dependency, it had positively reinforced them — Hammond was positioning his
	department in opposition to evidence and evidence-based transport policy. He was
	pledging to put Conservative ideology and tabloid-friendly announcements ahead of
	policies that had been shown to work. He was pledging to be a failure, to make
	transport in Britain a failure, to run-down the railways, let cycling stagnate, and leave
	a legacy of roads even more gridlocked than they already are. At War With The
	Motorist was set up in response to Hammond's absurd announcement. We
	document the current transport situation in Britain, follow the proclamations and
	activities of the transport secretary and his department, as well as those of the Mayor
	of London and local authorities, and we seek to understand the evidence for and
	against competing transport policies. We take a skeptical look at tabloid columns,
	and a sometimes nerdy look at transport psychology, statistics, and economics.
	We're not professional transport commentators, and are entirely independent from all

transport-related industries: we are merely interested lay people. Our target audience is *not* the hardened Motorist. We recognise that there is little that we can do for them. Our aim is in part to motivate the pedestrians and cyclists and train and bus commuters who are an afterthought in Hammond's vision. And our aim is in part to try to make our own little voices occasionally heard between the shrill ravings of the tabloid hacks: to add to the many little people who are trying to tell politicians and planners that people want an *alternative* to roads and cars, not more of the same mess that we have now.

Crap Cycling and Walking in Waltham Forest

I live in the London Borough of Waltham Forest. I cycle and walk the local streets most days of the year. The purpose of this blog is to illustrate the poor conditions facing cyclists and pedestrians on the Borough's streets and to demonstrate the gap between the Council's Green words and the actually existing state of things. This is a parochial blog but I like to think it has a wider significance, as the failings of national government regarding walking and cycling are reproduced at a local level. On this blog I also rant about wider issues such as road carnage and inadequate traffic law enforcement. As impending climate catastrophe nudges the human species towards extinction, this blog will be of enormous interest to extra-terrestrials as they research car dependency and the crap way cyclists and pedestrians were treated by a doomed society. Campaigners for cyclists and pedestrians, the press, and all extraterrestrials are welcome to reproduce any of these these photographs, but please include a link or reference to this blog.

Cycalogical

Musings Mainly About Cycling, Transport And The Environment. Particularly In The London Borough Of Merton.

The Cycling Lawyer

On his blog The Cycling Lawyer, Porter dissects recent cases and charts the progress of the cases he is attempting to bring against dangerous and aggressive motorists. Porter says the turning point for him was when he represented the family of a victim of a road accident at an inquest. "The quality of the investigation was appalling, the way the family had been treated was appalling, nobody had been brought to account," he says. "I just got cross, frankly, and disillusioned by what I saw. It does require something like that to bring it home to you." The blog shows Porter's shift from writing about his leisure rides to an increasing number of posts about the law and its enforcement - or, more usually, the lack of enforcement. "I saw that no one was really interested in me cycling about the place, but they were interested in what I had to say about law," he explains. Porter regularly blogs about cases concerning the use of helmets and whether injured cyclists should be penalised for contributory negligence. (Harris, 2011)

Cyclists in the City

Danny has attracted London-wide attention with his Cyclists in the City blog, which has been a consistent thorn in the side of decision-makers who won't do enough to promote cycling in London. Danny pays particular attention to developments in the City, where he works, and he campaigned to improve its Local Implementation Plan

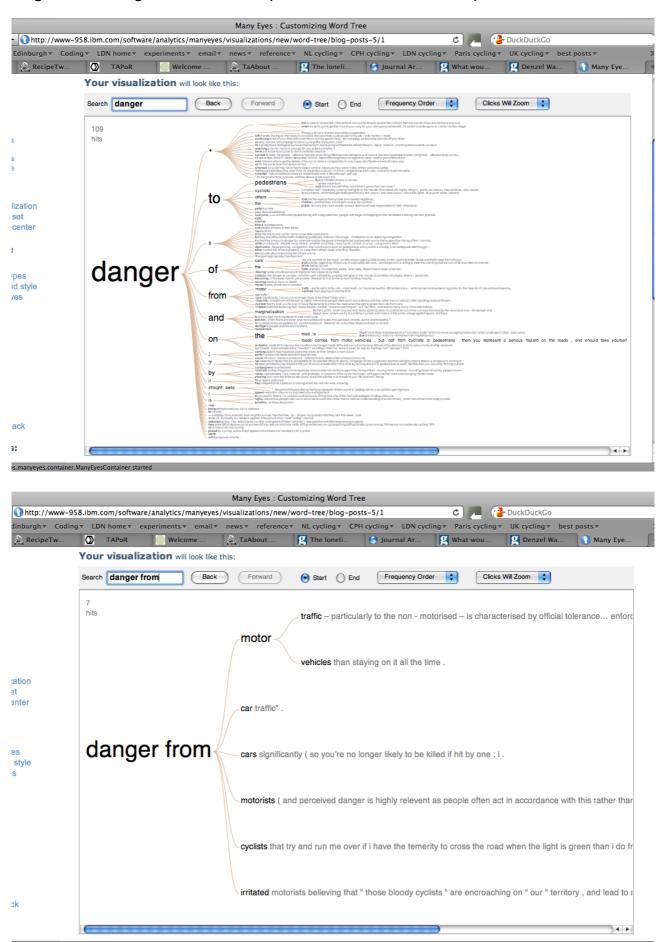
	and to highlight the need for change at the Blackfriars junction. He recently became
	the official local group co-ordinator for City Cyclists, [the London Cycling Campaign's]
	group in the City. (LCC, 2011)
GrumpyCyclist	Several years ago I drove everywhere in London. After one ticket too many, I decided
	there had to be a better way. I dusted off the cycle, and discovered a completely new
	and convenient way to travel around town. However, the more I cycled, and the more
	I read about cycle provision from our local councils, the more I realised that the
	cycling experience should be so much better, and that our local authorities are
	spouting eco-fluff instead of actually improving matters.
The Guardian Bike	The Guardian Bike Blog is one of the most vibrant sections of the newspaper's
Blog	website. Here, a cycling community from around the world gives their views, rants,
	complaints, and every clever tip available - from keeping warm in winter to beating
	the bike thieves. (Randerson and Walker, 2011)
ibikelondon	My aim is to stimulate discussion about the place of the humble bicycle in the urban
	realm - specifically London - and to look at ways in which we can rehabilitate it into
	our lives
Konnington Boonlo	
Kennington People	About getting more people riding bikes more often in Kennington, Lambeth
on Bikes	
Lo Fidelity Bicycle	This blog is not anti-car as I'm a car owner myself but the bicycle will always remain
Club	my primary mode of transport. I detest what people become when they get behind a
	steering wheel (myself included)
Pedestrianise	Obviously the title of this blog is a little tongue in cheek, of course motor vehicles
London	have their place in a modern city, but maybe things have gone a little too far and it's
	time to re-prioritise our valuable street space. London is a historic city dating back to
	Roman times and has seen many changes throughout her days. The most recent of
	those is the introduction of the motor vehicle and the removal of pedestrians and
	cyclists from her streets. Motor vehicles have only been around for a hundred years,
	but they have made themselves irreversibly felt throughout our city, depriving us of
	easy going liveable streets where people can go about their business without the
	noise and danger the motor vehicle brings with it. Pedestrianise London is a blog
	about bringing harmony back to the streets of London, about positive steps
	Londoners can take to reclaim our streets for the next generation, about creating a
	more liveable and friendly city Paul James lives in west London with his wife and
	daughter. Using a bicycle to get around London for the last 8 years, it took the
	creation of the Cycle Embassy of Great Britain, the marrying of his Dutch wife, and
	10 years of family trips to the Netherlands to realise that the Dutch have something
	very special and that the UK needs to learn from their 40 years of experience in
	providing for everyday cycle transport. Paul is now an active member of the Cycle
	Embassy of Great Britain, local cycle campaigner in the London borough of
	Richmond, and street geek blogger. Due to his engineering background and

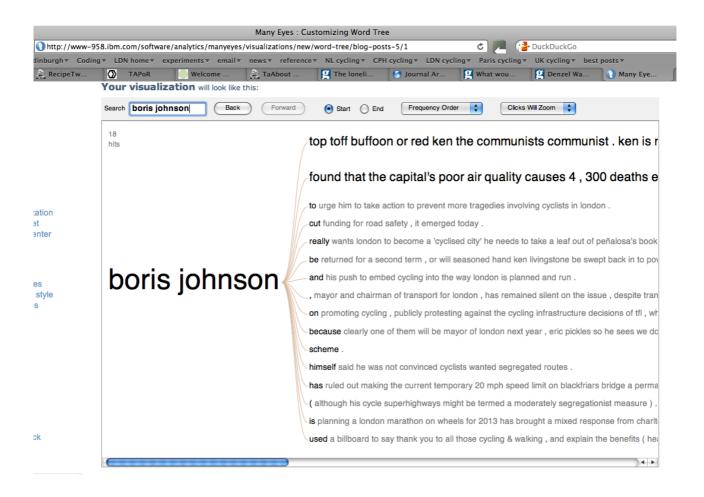
	exposure to the Dutch way of riding a bike, his aim is to become a local expert in all
	things Dutch cycling infrastructure.
The Ranty	This blog is a little bit of respite form the day job and helps me research and learn
Highwayman	about the current issues facing the develop of walking and cycling networks in the
	UK's urban areas (as well as moaning about other highways and transport-related
	things!) [] As a professional engineer, I have a responsibility to promote
	engineering and to assist younger engineers in their own development. I hope that
	some of my technical posts help in this regard. This blog allows me to be part of the
	debate which is showing that business as usual with unrestricted car use is not
	sustainable or desirable for our towns and cities and the communities who live within.
	I have commuted to work by bike most days since early 2011. Where possible, I
	travel to work sites by bike and I always cycle proposed cycle routes. It hasn't always
	been like this, I used to drive everywhere and design from a driver's point of view and
	it is likely that I will still be involved in schemes which some people will not like
	(including me!), but that is part of the price to be had in implementing the policies of a
	politically-led organisation. I am very interested in how cycling conditions can be
	improved and maybe it is penance for my pre-cycling engineering days. I also walk a
	fair bit for the most local journeys and pedestrians are under siege from traffic as well
	as those using bikes. I do drive for longer journeys or if I have to carry kit around. I
	have even been known to drive a lorry! I am happy to be challenged on anything I
	post and I welcome the debate the world of blogging brings. The only way we are
	going to ever change anything is to take on the decision-makers at their own game.
	As a professional working for a local authority highways department I am bound to
	give objective advice whether or not I personally agree with a policy or scheme. I am
	not allowed to give a political bias, but I do try and put forward the argument for
	walking, cycling and indeed public transport whenever possible - perhaps I can
	create a little change from within! I do tend to shy away from work-related posts for
	obvious reasons, but some will be "work inspired". I am not an expert in walking and
	cycling matters by any means, but I am trying to improve my knowledge. So thank
	you for your interest and feel free to ask questions either within the posts, or on the
	questions tab. I may not have an answer, but I will always have an opinion. There is
	never such a thing as a stupid question and I bet you have things which will teach
	me. See you in the saddle!
Sustainable	News, views, and information about sustainable living, especially transport,
Transport in Barking	particularly cycling, in Barking area of east London.
(and surrounding	
areas)	
Two Wheels Good	Cycling as a form of transport in London and the rest of the UK. Do read if you cycle
	from A to B or are interested using a bike to get around! [] I'm a Londoner and wish
	it was easier and safer to travel around the UK by bicycle

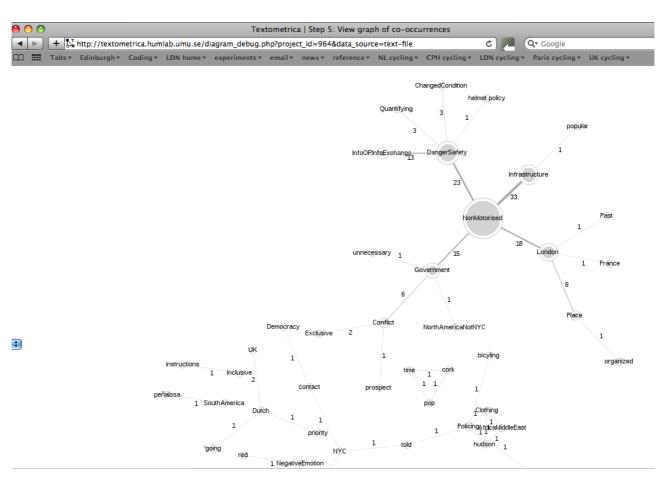
UK Cycle Rules	I'm a barrister practising mainly in regulatory law. I started cycling to work in early 2009. I found myself riding around and wondering what would happen if I was caught going the wrong way up a one-way street, jumping a red or something similar. I began doing some research and writing up what I found out, and UK Cycle Rules was the result.
Vole O'Speed	Mostly about cycling in the "Biking Borough" of Bren t and elsewhere in London, but also touching on environment, politics, philosophy, science, society, music and art
NEW YORK	
BikeBlog	I started BikeBlog.blogspot [] in February 2005, in the heat of battle, when the New York Police Department was bearing down on our once peaceful critical mass. An enormous precedence was being set [] to NYC [] I wanted a way to personalize the experience through my own words
Brooklyn Spoke	I'm Doug Gordon. Just another voice in the ongoing discussion about New York's livable streets revolution. I live in Brooklyn with my wife, daughter, and son and am way too obsessed with design, urban planning, and cities.
Gothamist	Gothamist is [] the most popular local blog in New York. Founded in early 2003, Gothamist has been described by The New York Times as a "marvelous, not-to-be-missed Web site" that "reflects everything worth knowing about this city."
Streetsblog	Streetsblog is a daily news source connecting people to information about sustainable transportation and livable communities. Since 2006, Streetsblog has covered the movement to transform our cities by reducing dependence on private automobiles and improving conditions for walking, biking, and transit. Our reporters have broken important stories about transit funding, pedestrian safety, and bicycle policy from day one. And our writing makes arcane topics like parking prices and induced traffic accessible to a broad audience. Today, hundreds of thousands of readers rely on Streetsblog, and our online community is the connective fiber for people all over the country working to make their streets safer and more sustainable. Streetsblog New York City, Los Angeles, San Francisco, Chicago, USA, and the national Streetsblog Network connect local, grassroots livable streets advocates with one another and to a national movement for reform. Streetsblog NYC covers the five boroughs of New York and important transportation policy developments in Albany. Starting with our first scoop in 2006, which tallied up the rampant abuse of parking placards, we've helped set the agenda for local transportation coverage. We're read by an influential audience of decision makers and ordinary New Yorkers passionate about improving the livability of their neighborhoods. Streetsblog stories have made the case for progressive policy changes that are saving lives and creating a more sustainable future for New York. Streetsblog is produced by OpenPlans, a 501c3 non-profit organization. We are funded by foundation grants, sponsorships and advertising, and through generous donations from readers like you.

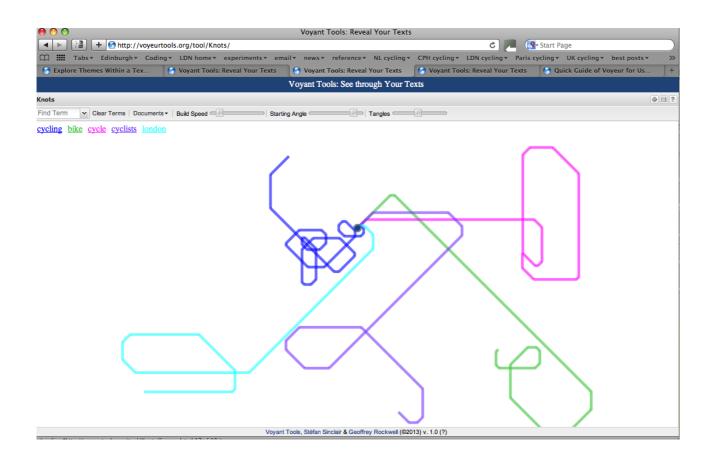
velojoy	Everything in New York City is big and vibrant, including a cycling scene that's
	changing the beat of our city streets. Riding a bicycle here is an everyday adventure
	[] a much-discussed enterprise as cycling rolls toward full integration into the urban
	transportation system.
PARIS	
Isabelle et le velo	News about cycling as mode of transport
A Parisian Cyclist	Cycling everyday in Paris for a dozen or so years, I would like to share some of these
	experiences so that maybe you too will want to cycle
Pas de voiture	Life without a car is possible. This site is about life without a car, alternatives to the
	car and putting them into action.

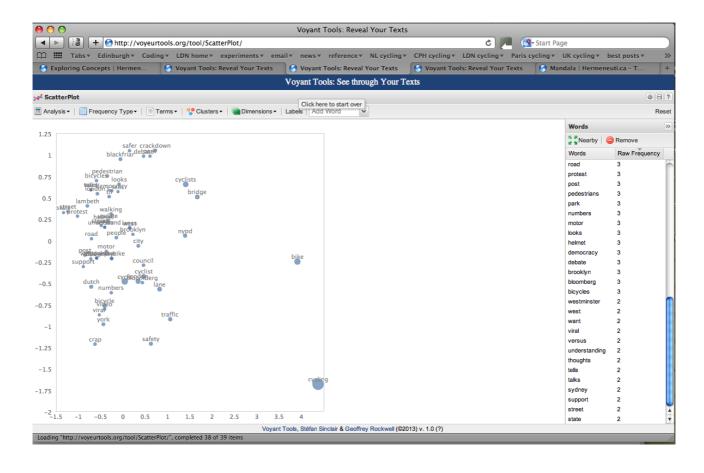
Appendix B: 'Pretty pictures' resulting from methodological forays into the visualisation of blog content using various software (see also sections 3.2 and 9.2).

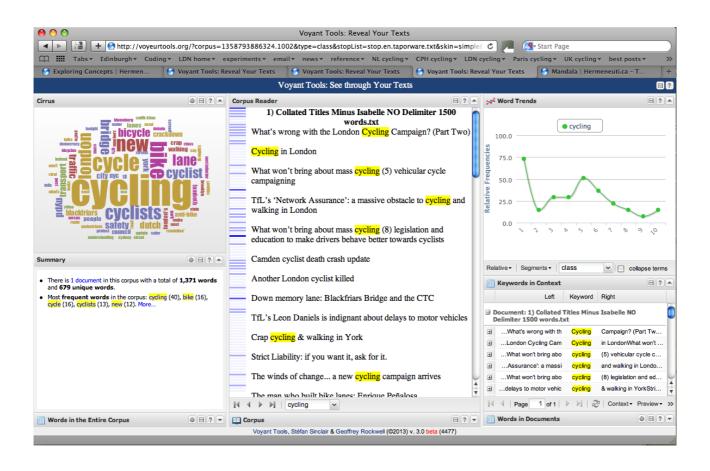


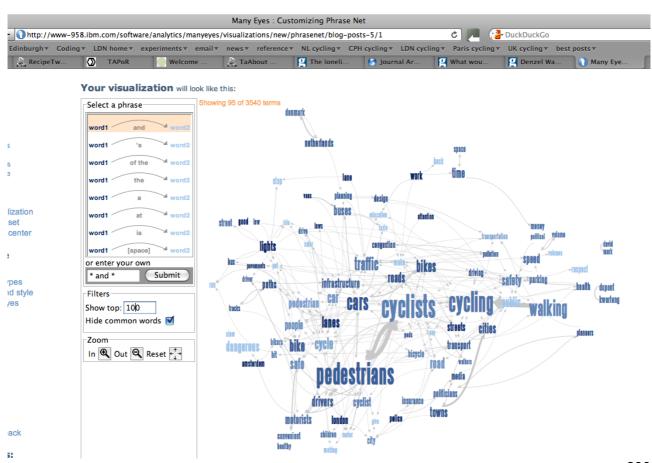


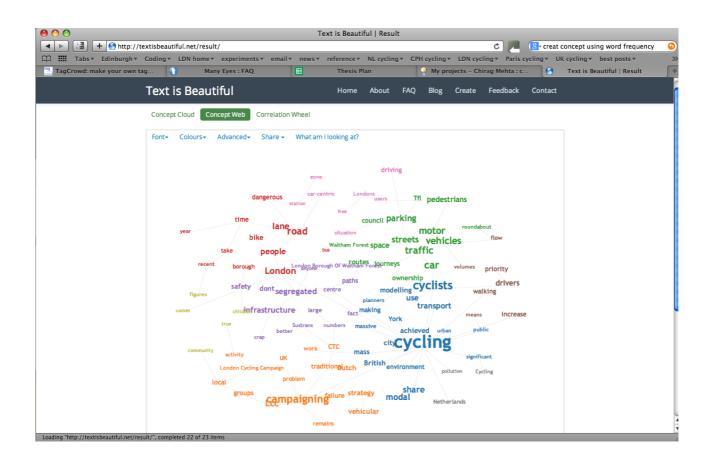


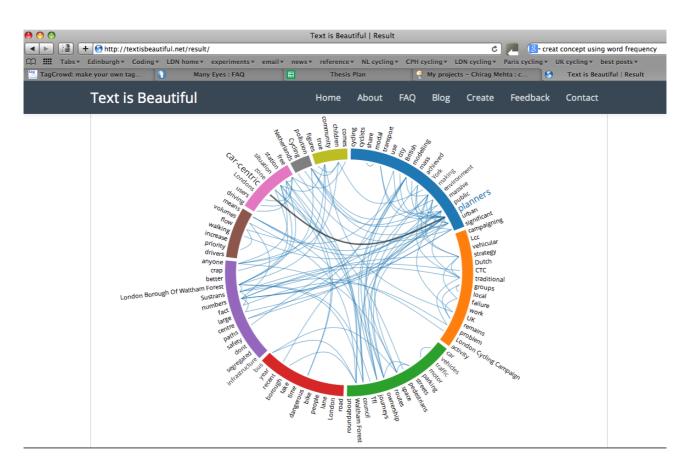


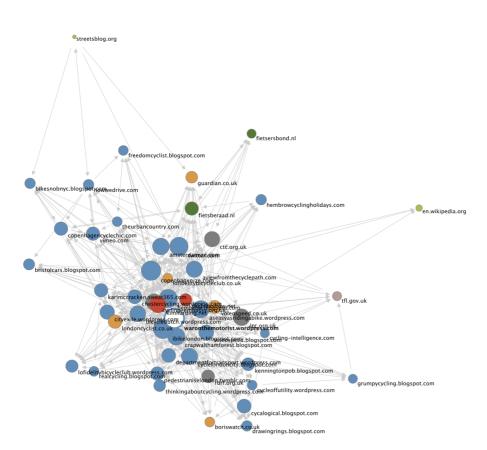














Appendix C: Example Interview Schedules

Below are example interview schedules to give a flavour of the kinds of questions asked and themes covered in each interview depending on the participant's role as a blogger or key stakeholder/expert system representative. Some of these questions and themes were particularised, or tailored to the individual context.

Bloggers

Your Blog(ging)

Why did you start blogging?

What are the goals/objectives/aims of your blogging? What is your 'blogging purpose'? Why do you continue blogging?

How would you describe your particular approach to blogging about cycling/transport policy? Why this approach? How would you describe your blog? (e.g. policy, political, advocacy, informational, watchdog, opinion-shaper, awareness-raising, entertainment, etc.)

Has your blogging/topics/objectives changed over time? If so, how and why?

How would you describe your readership? What is your perception of your readers? (e.g. where they live, why they read your blog, how many there are, whether they are supporters/critics)

How do you engage with your readers?

How do you process/manage reader comments?

Your best/worst blogging moments/situations? Good/bad/challenging aspects of blogging?

Are there any indications that your blog is (not) influential/does (not) make a difference? Do you think your blog has influence/makes a difference?

Have you had any interaction with institutions/expert systems/key stakeholders (government/city officials, media/journalists, civil society organisations/campaigners) because of your blog? If so, what happened?

What is your interaction like with other bloggers?

What offline interactions have occurred because of your blog?

Have you had any opportunities that you would not have otherwise had because of your blog?

Apart from blogging, did/do you engage with cycling/transport policy in other ways? (e.g. as part of an advocacy group, via traditional political processes, etc.)

Expert system representatives

Your Professional/Institutional Role

Describe your professional/institutional role/work/background.

Policy Blogosphere

Have you had any interaction with bloggers, or other individuals because of blogs?

How do you/your colleagues/you institution deal with criticism communicated via blogging? (e.g. ignore it, engage with it)

Cycling (Policy)

How does policy knowledge from elsewhere feed into/inform your (institutions's) work (e.g bike hire)? How does your (institutions's) policy knowledge travel elsewhere? How does policy knowledge tend to move around? Thoughts about the transferability of best practice?

Lessons to be learned, import-export of cycling-related policy knowledge, benchmarking...

What kind of interaction do you have with your peers elsewhere? (e.g. online/email/social media, face-to-face/site visits/conferences, official documentation)

Bloggers and expert system representatives

Policy Blogosphere

How would you describe the blogosphere? (in London/NYC/Paris/internationally) What purpose/role does it serve? Does it make a difference? If so, how and what? If not, why? What are its limitations?

Who do you suspect does/not follow these blogs and why?

Do you follow any blogs? If not, why? If so, which ones (locally, at a distance) and why? Which blogs/bloggers are most influential? Why?

How would you describe blogging's critical relationship with institutions (e.g. (in)effective, improving and/or compromising democratic processes/representation by applying pressure, demanding transparency/accountability, challenging official claims to knowledge and legitimacy, giving voice to the people)?

Are you aware of [a particular blog/blogger/blog post/blogging-related phenomenon]? Any comments about it?

Cycling (Policy)

How would you describe cycling/transport/policy in London/NYC/Paris/elsewhere? Any comments on transport/policy trends?

What are your sources of (local/international) cycling/transport (policy) information?

Any thoughts on the international/interurban role of cycling/transport policy in London/NYC/Paris/elsewhere?

Miscellaneous

Do you use other social media platforms to communicate cycling-related transport policy? If so, which ones and why? If not, why?

[Prompt with/quote from the content of a blog and/or another anonymous participant's interview] What do you think about that?

Anything I didn't ask that you'd like to add?

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